

SEQUENCE LISTING

<110> Chia Tai Tianqing Pharmaceutical Group Co., Ltd.

<120> ANTI-IL-36R ANTIBODY AND USE THEREOF

<150> 202110675925.6

<151> 2021-06-18

<160> 90

<170> SIPOSequenceListing 1.0

<210> 1

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR1 of mouse, chimeric and humanized 72C1 antibodies

<400> 1

Gly Ala Ser Ile Thr Ser Gly Tyr Trp Asn

1 5 10

<210> 2

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> UNSURE

<222> (3)

<223> Xaa = S or Y

<220>

<223> VH-CDR2 of mouse, chimeric and humanized 72C1 antibodies

<400> 2

Tyr Ile Xaa Tyr Ser Gly Tyr Thr Tyr Tyr Asn Pro Ser Leu Lys Ser

1 5 10 15

<210> 3
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> VH-CDR3 of mouse, chimeric and humanized 72C1 antibodies

<400> 3
Gly Gly Tyr Asp Tyr Val Glu Asp Ala Leu Tyr Tyr
1 5 10

<210> 4
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> VL-CDR1 of mouse, chimeric and humanized 72C1 antibodies

<400> 4
Arg Ala Ser Ser Asn Val Arg Tyr Met Tyr
1 5 10

<210> 5
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> VL-CDR2 of mouse, chimeric and humanized 72C1 antibodies

<400> 5
Leu Thr Ser Asn Leu Ala Ser
1 5

<210> 6
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<221> UNSURE

<222> (3)

<223> Xaa = F or Y

<220>

<223> VL-CDR3 of mouse, chimeric and humanized 72C1 antibodies

<400> 6

Gln Gln Xaa Thr Thr Ser Pro Tyr Thr

1 5

<210> 7

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of mouse and chimeric 72C1 antibodies

<400> 7

Glu Val Gln Leu Gln Gln Ser Gly Pro Ser Leu Val Lys Pro Ser Gln

1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Val Thr Gly Ala Ser Ile Thr Ser Gly

20 25 30

Tyr Trp Asn Trp Ile Arg Asn Phe Pro Gly Asn Lys Leu Glu Tyr Met

35 40 45

Gly Tyr Ile Ser Tyr Ser Gly Tyr Thr Tyr Tyr Asn Pro Ser Leu Lys

50 55 60

Ser Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Tyr Tyr Leu

65 70 75 80

Gln Leu Ile Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr Tyr Cys Ala

85 90 95

Thr Gly Gly Tyr Asp Tyr Val Glu Asp Ala Leu Tyr Tyr Trp Gly Gln

100 105 110

Gly Thr Ser Val Thr Val Ser Ser

115 120

<210> 8

<211> 360

<212> DNA
<213> Artificial Sequence

<220>
<223> VH of chimeric 72C1 antibody

<400> 8
gaggtgcagc tgcagcagtc cggccccctct ctggtgaagc cttctcagac cctgagcctg 60
acatgctccg tgaccggcgc cagcatcaca tccggctact ggaactggat ccggaatttc 120
ccaggcaaca agctggagta catgggctat atctcttaca gcggctatac ctactataat 180
ccctctctga agagccggat ctccatcacc agagacacat ctaagaacca gtactatctg 240
cagctgatct ccgtgaccac agaggatacc gccacatact attgtgccac aggcggtctac 300
gactatgtgg aggatgccct gtactattgg ggccagggca ccagcgtgac agtgagctcc 360

<210> 9
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> VH of hz72C1-1.1 and hz72C1-2.1 antibodies

<400> 9
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Thr Ser Gly
20 25 30
Tyr Trp Asn Trp Ile Arg Asn His Pro Gly Lys Gly Leu Glu Tyr Ile
35 40 45
Gly Tyr Ile Ser Tyr Ser Gly Tyr Thr Tyr Tyr Asn Pro Ser Leu Lys
50 55 60
Ser Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80
Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95
Thr Gly Gly Tyr Asp Tyr Val Glu Asp Ala Leu Tyr Tyr Trp Gly Gln
100 105 110
Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 10
<211> 360

<212> DNA
 <213> Artificial Sequence

<220>
 <223> VH of hz72C1-1.1 and hz72C1-2.1 antibodies

<400> 10
 caggtgcagc tgcaggagtc cggaccagga ctggtgaagc cttctcagac cctgtccctg 60
 acctgcacag tgtccggcgc cagcatcaca tctggctact ggaactggat caggaatcac 120
 ccaggcaagg gcctggagta catcggtat atcagctact ctggctatac ctactataac 180
 ccctccctga agagcagggt gaccatcagc cgggacacat ctaagaatca gttctccctg 240
 aagctgtcca gcgtgaccgc cgctgataca gccgtgtact attgtgctac aggcggctac 300
 gactatgtgg aggatgctct gtactattgg ggccaggga ccctgggtgac agtgtcttcc 360

<210> 11
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VH of hz72C1-1.2 and hz72C1-2.2 antibodies

<400> 11
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Thr Ser Gly
 20 25 30
 Tyr Trp Asn Trp Ile Arg Asn His Pro Gly Lys Gly Leu Glu Tyr Ile
 35 40 45
 Gly Tyr Ile Ser Tyr Ser Gly Tyr Thr Tyr Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Tyr Tyr Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Thr Gly Gly Tyr Asp Tyr Val Glu Asp Ala Leu Tyr Tyr Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 12
 <211> 360

<212> DNA
 <213> Artificial Sequence

<220>
 <223> VH of hz72C1-1.2 and hz72C1-2.2 antibodies

<400> 12
 caggtgcagc tgcaggagtc cggaccagga ctggtgaagc cttctcagac cctgtccctg 60
 acctgcacag tgtccggcgc cagcatcaca tctggctact ggaactggat caggaatcac 120
 ccaggcaagg gcctggagta catcgctat atcagctact ctggctatac ctactataac 180
 ccctccctga agagcagggt gaccatcagc cgggacacat ctaagaatca gtactatctg 240
 aagctgtcca gcgtgaccgc cgctgataca gccgtgtact attgtgctac aggcggctac 300
 gactatgtgg aggatgctct gtactattgg ggccagggca ccctgggtgac agtgtcttcc 360

<210> 13
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VH of hz72C1-1.3 and hz72C1-2.3 antibodies

<400> 13
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Ala Ser Ile Thr Ser Gly
 20 25 30
 Tyr Trp Asn Trp Ile Arg Asn His Pro Gly Lys Gly Leu Glu Tyr Ile
 35 40 45
 Gly Tyr Ile Tyr Tyr Ser Gly Tyr Thr Tyr Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Tyr Tyr Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Thr Gly Gly Tyr Asp Tyr Val Glu Asp Ala Leu Tyr Tyr Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 14
 <211> 360

<212> DNA

 $\langle 220 \rangle$

<400> 14

⟨210⟩ 15

<212> PRT

 $\langle 220 \rangle$

<400> 15

16

⟨212⟩ DNA

<220>

<223> VL of chimeric 72C1 antibody

<400> 16

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gagatcctgc tgaccagtc cccagccatc atgtctgcca ccctgggcga gaagtgaca      60
atgtcctgcc gggccagctc caacgtgaga tacatgtatt ggtaccagct gaagagcggc    120
gcctccccc a gctgtggat ctatctgacc tctaattctgg caagcggagt gcctgcacgg    180
ttctccggct ctggcagcgg cacctcctac tctctgacaa tctctagcgt ggaggcagag    240
gacgcagcaa catatttctg tcagcagttt accacaagcc cctacacctt tggcggcggc    300
acaaagctgg agatcaag                                     318
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<210> 17

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> VL of hz72C1-1.1, hz72C1-1.2 and hz72C1-1.3 antibodies

<400> 17

```
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 Ser Asn Val Arg Tyr Met
          20          25          30
Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr
        35          40          45
Leu Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
        50          55          60
Gly Ser Gly Thr Ser Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65          70          75          80
Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Phe Thr Thr Ser Pro Tyr Thr
          85          90          95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
        100          105
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<210> 18

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<223> VL of hz72C1-1.1, hz72C1-1.2 and hz72C1-1.3 antibodies

<400> 18

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gacatccaga tgaccagtc cccttcagc ctgtccgcca gcgtgggcga tagggtgacc      60
atcacatgcc gggcttcttc caacgtgaga tacatgtatt ggtaccagca gaagcccggc      120
aaggccccta agctgtggat ctatctgaca tctaattctgg cttccggagt gccaagccgc      180
ttctctggat ccggaagcgg cacctcttac accctgacaa tcagctctct gcagccagag      240
gactttgcca catactattg tcagcagttc accacatccc cctatacctt tggccagggc      300
acaaagctgg agatcaag                                         318
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<210> 19

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> VL of hz72C1-2.1, hz72C1-2.2 and hz72C1-2.3 antibodies

<400> 19

```
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 Ser Asn Val Arg Tyr Met
          20           25           30
Tyr Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr
          35           40           45
Leu Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
          50           55           60
Gly Ser Gly Thr Ser Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65           70           75           80
Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Thr Thr Ser Pro Tyr Thr
          85           90           95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
          100          105
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<210> 20

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<223> VL of hz72C1-2.1, hz72C1-2.2 and hz72C1-2.3 antibodies

<400> 20
gacatccaga tgacccagtc cccttccagc ctgtccgcca gcgtgggcga tagggtgacc 60
atcacatgcc gggctttctt caacgtgaga tacatgtatt ggtaccagca gaagcccggc 120
aaggccccta agctgtggat ctatctgaca tctaattctgg cttccggagt gccaagccgc 180
ttctctggat ccggaagcgg cacctcttac accctgacaa tcagctctct gcagccagag 240
gacttcgcca catactattg tcagcagtat accacatccc cctacacctt tggccagggc 300
acaaagctgg agatcaag 318

<210> 21
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> UNSURE
<222> (3)
<223> Xaa = F or Y

<220>
<223> VH-CDR1 of mouse, chimeric and humanized 84C4 antibodies

<400> 21
Gly Tyr Xaa Phe Thr Ser Tyr Trp Met Asn
1 5 10

<210> 22
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> UNSURE
<222> (1)
<223> Xaa = M or Y

<220>
<221> UNSURE
<222> (3)
<223> Xaa = H or Y

<220>
 <221> UNSURE
 <222> (11)
 <223> Xaa = L or Y

<220>
 <221> UNSURE
 <222> (12)
 <223> Xaa = N or A

<220>
 <221> UNSURE
 <222> (16)
 <223> Xaa = K or Q

<220>
 <223> VH-CDR2 of mouse, chimeric and humanized 84C4 antibodies

<400> 22
 Xaa Ile Xaa Pro Tyr Asp Ser Glu Thr Arg Xaa Xaa Gln Lys Phe Xaa
 1 5 10 15
 Gly

<210> 23
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> VH-CDR3 of mouse, chimeric and humanized 84C4 antibodies

<400> 23
 Ser Thr Thr Ala Phe Ala Tyr
 1 5

<210> 24
 <211> 10

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> VL-CDR1 of mouse, chimeric and humanized 84C4 antibodies

 <400> 24
 Ala Ser Gln Asp Ile Gly Asn Ala Leu Asn
 1 5 10

 <210> 25
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> VL-CDR2 of mouse, chimeric and humanized 84C4 antibodies

 <400> 25
 Ala Thr Ser Ser Leu Asp Pro
 1 5

 <210> 26
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> VL-CDR3 of mouse, chimeric and humanized 84C4 antibodies

 <400> 26
 Leu Gln Tyr Ala Ser Ser Pro Tyr Thr
 1 5

 <210> 27
 <211> 116
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> VH of mouse and chimeric 84C4 antibodies

<400> 27

Glu Val Gln Leu Gln Gln Leu Gly Ala Glu Leu Val Arg Pro Gly Ala
1 5 10 15
Ser Val Met Leu Ser Cys Lys Val Ser Gly Tyr Phe Phe Thr Ser Tyr
20 25 30
Trp Met Asn Trp Val Asn Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
35 40 45
Gly Met Ile His Pro Tyr Asp Ser Glu Thr Arg Leu Asn Gln Lys Phe
50 55 60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ala Ser Thr Ala Tyr
65 70 75 80
Leu Gln Leu Ser Ser Pro Thr Ser Glu Glu Tyr Ala Val Tyr Tyr Cys
85 90 95
Ala Ser Ser Thr Thr Ala Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110
Thr Val Ser Ala
115

<210> 28

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH of chimeric 84C4 antibody

<400> 28

gaggtgcagc tgcagcagct gggagcagag ctggtgcggc caggagcaag cgtgatgctg 60
tcctgcaagg tgtctggcta cttctttacc agctattgga tgaactgggt gaatcagagg 120
ccaggacagg gactggagtg gatcggcatg atccaccctt acgactccga gacaagactg 180
aaccagaagt tcaagggcaa ggccaccctg acagtggata agtccgcctc taccgcctac 240
ctgcagctga gctccccac atctgaggag tatgccgtgt actattgtgc ctctagcacc 300
acagcctttg cctattgggg ccagggcacc ctggtgacag tgagcgcc 348

<210> 29

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.1 and hz84C4-2.1 antibodies

<400> 29

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Phe Phe Thr Ser Tyr
 20 25 30
Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
Gly Met Ile His Pro Tyr Asp Ser Glu Thr Arg Tyr Ala Gln Lys Phe
 50 55 60
Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
Ala Ser Ser Thr Thr Ala Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
Thr Val Ser Ser
 115

<210> 30

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.1 and hz84C4-2.1 antibodies

<400> 30

caagtgcagc tgggtgcagag cggagccgag gtgaaaaagc cgggcgttc tgtgaaggtg 60
tcctgcaagg ccagcggcta cttcttcacc tcctactgga tgaactgggt gcggcaggcc 120
cctggccagg gcctggaatg gatgggcatg atccaccctt acgacagcga gacaagatac 180
gcccagaagt tccagggcag agtgaccatg accgtggata agagcaccag cacagtgtat 240
atggaactga gcagcctgag aagcgaggac accgccgtgt actactgtgc ctcttctaca 300
accgcttttg cctactgggg ccagggaacc ctggttacag tcagcagc 348

<210> 31

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.2 and hz84C4-2.2 antibodies

<400> 31

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Phe Phe Thr Ser Tyr
 20 25 30
Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
Gly Tyr Ile His Pro Tyr Asp Ser Glu Thr Arg Tyr Ala Gln Lys Phe
 50 55 60
Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
Ala Ser Ser Thr Thr Ala Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
Thr Val Ser Ser
 115

<210> 32

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.2 and hz84C4-2.2 antibodies

<400> 32

caagtgcagc tggttcagag cggcgccgag gtgaagaagc ctggcgctag cgtgaaggtg 60
tcttgtaaag cctctggcta cttcttcacc agctactgga tgaactgggt cagacaggcc 120
cctggccagg gcctggaatg gatgggatat atccaccctt acgacagcga gacaagatac 180
gcccagaagt tccagggcag agtgacaatg accgtggaca agtccacctc tacagtgtac 240
atggaactga gcagcctgcg gagcgaggat accgccgtgt actactgcgc cagcagcacc 300
accgcttttg cctactgggg ccaggaaca ctggtgaccg tgtccagc 348

<210> 33

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.3 and hz84C4-2.3 antibodies

<400> 33

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Phe Phe Thr Ser Tyr
20 25 30
Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45
Gly Met Ile Tyr Pro Tyr Asp Ser Glu Thr Arg Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Ser Ser Thr Thr Ala Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110
Thr Val Ser Ser
115

<210> 34

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.3 and hz84C4-2.3 antibodies

<400> 34

caagtgcagc tggttcagag cggcgccgag gtgaaaaagc ctggcgcttc tgtgaaggtg 60
tcctgcaagg cctctggcta cttcttcacc tcctactgga tgaactgggt gcggcaggcc 120
cctggacagg gcctggaatg gatgggcatg atctaccctt acgacagcga gacaagatac 180
gcccagaagt tccaggggaag agtgacaatg accgtggata agagcaccag cacagtgtat 240
atggaactga gcagcctgag aagcgaggac accgccgtgt actactgtgc cagcagcacc 300
acagcttttg cctactgggg ccagggcacc ctggtgaccg tcagctct 348

<210> 35

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.4 and hz84C4-2.4 antibodies

<400> 35

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Tyr Phe Thr Ser Tyr
20 25 30
Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45
Gly Met Ile His Pro Tyr Asp Ser Glu Thr Arg Leu Ala Gln Lys Phe
50 55 60
Lys Gly Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Ser Ser Thr Thr Ala Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110
Thr Val Ser Ser
115

<210> 36

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.4 and hz84C4-2.4 antibodies

<400> 36

caagtgcagc tgggtccagag cggcgccgag gtgaaaaagc ctggagcttc tgtgaaggtg 60
tcctgcaagg cctccggcta ctacttcacc agctactgga tgaactgggt gcggcaggcc 120
cctggccagg gcctggaatg gatgggcatg atccaccctt acgacagcga gacaagactg 180
gcccagaaat tcaagggcag agtgaccatg accgtggata agagcacaag caccgtgtac 240
atggaactga gcagcctgag aagcgaggac accgccgtgt actattgtgc ctctagcacc 300
accgcttttg cctactgggg ccaggaaca ctggtgacag tttctagc 348

<210> 37

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.5 and hz84C4-2.5 antibodies

<400> 37

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Phe Phe Thr Ser Tyr
20 25 30
Trp Met Asn Trp Val Asn Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45
Gly Met Ile His Pro Tyr Asp Ser Glu Thr Arg Leu Ala Gln Lys Phe
50 55 60
Lys Gly Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Val Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Ser Ser Thr Thr Ala Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110
Thr Val Ser Ser
115

<210> 38

<211> 348

<212> DNA

<213> Artificial Sequence

<220>

<223> VH of hz84C4-1.5 and hz84C4-2.5 antibodies

<400> 38

caagtgcagc tggttcagag cggcgccgag gtgaaaaagc ctggcgcttc tgtgaaggtg 60
tcttgtaaag tgtccgata tttcttcacc agctactgga tgaactgggt caaccaggcc 120
cctggacagg gcctggaatg gatgggcatg atccaccctt acgacagcga gacaagactg 180
gcccagaagt tcaagggcag agtgaccatg accgtggata agagcacctc taccgtgtac 240
atggaactga gcagcctgcg gagcgaggac accgccgtgt actactgcgc cagcagcaca 300
acagcttttg cctactgggg ccagggcacc ctggtgacag tgtccagc 348

<210> 39

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL of mouse and chimeric 84C4 antibodies

<400> 39

Asp Ile Leu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15
Glu Arg Val Ser Leu Thr Cys Arg Ala Ser Gln Asp Ile Gly Asn Ala
 20 25 30
Leu Asn Trp Leu Gln Gln Ala Pro Asp Gly Thr Ile Lys Arg Leu Ile
 35 40 45
Tyr Ala Thr Ser Ser Leu Asp Pro Gly Val Pro Lys Arg Phe Ser Gly
 50 55 60
Ser Arg Ser Gly Ser Asp Tyr Ser Leu Thr Ile Ser Ser Leu Ala Ser
65 70 75 80
Glu Asp Phe Val Tyr Tyr Tyr Cys Leu Gln Tyr Ala Ser Ser Pro Tyr
 85 90 95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 40

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> VL of chimeric 84C4 antibody

<400> 40

gacatcctga tgaccagag cccaagctcc ctgtctgcc gctgggaga gagggtgtct 60
ctgacatgca gggcaagcca ggacatcgga aacgccctga attggctgca gcaggccccc 120
gatggcacca tcaagcggt gatctatgcc acatctagcc tggatcccgg cgtgcctaag 180
cggttctccg gctctagaag cggctccgac tactccctga ccatctctc tctggcctct 240
gaggatttcg tgtactatta ctgtctgcag tatgcaagct cccatacac ctttggcgga 300
ggaacaaagc tggagatcaa g 321

<210> 41

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL of hz84C4-1.1, hz84C4-1.2, hz84C4-1.3, hz84C4-1.4 and hz84C4-1.5 antibodies

<400> 41

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 Asp Ile Gly Asn Ala
20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45
Tyr Ala Thr Ser Ser Leu Asp Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Tyr Ala Ser Ser Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 42

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> VL of hz84C4-1.1, hz84C4-1.2, hz84C4-1.3, hz84C4-1.4 and hz84C4-1.5
antibodies

<400> 42

gatattcaga tgaccagag cccttcctcc ctgagcgcta gcgtgggcga cagagtgacc 60
atcacctgta gagcctctca ggacatcggc aacgccctga actggtacca gcagaaacct 120
ggcaaggccc ctaagcggt gatctacgcc accagcagcc tggaccccg agtccccagc 180
agattcagcg gcagccggag cggaacagat ttaccctga ccatcagctc cctgcaacct 240
gaggacttcg ccacatacta ctgcctgcag tacgcttctt ctccatatac attcggccag 300
ggcaccaagg tggaaatcaa g 321

<210> 43

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL of hz84C4-2.1, hz84C4-2.2, hz84C4-2.3, hz84C4-2.4 and hz84C4-2.5
antibodies

<400> 43

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 Asp Ile Gly Asn Ala
20 25 30
Leu Asn Trp Leu Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45
Tyr Ala Thr Ser Ser Leu Asp Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Arg Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Tyr Ala Ser Ser Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 44

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> VL of hz84C4-2.1, hz84C4-2.2, hz84C4-2.3, hz84C4-2.4 and hz84C4-2.5
antibodies

<400> 44

gatattcaga tgaccagag cccatcttcc ctgagcgcca gcgtgggcga tagagtgacc 60
atcacctgta gagcctcca ggacatcggc aacgccctga actggctgca gcagaaacct 120
ggcaaggccc ctaagcggt gatctacgt acaagctccc tcgaccccg cgtecccagc 180
agattcagcg gatctcggag cggaacagac tacaccctga ccatcagcag cctgcaacct 240
gaggacttcg ccacctacta ctgcctgcag tacgcttcta gcccttatac ctttggccag 300
ggcacaagg tggaaatcaa g 321

<210> 45

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR1 of mouse and chimeric 74B4D6 antibodies

<400> 45

Gly Tyr Thr Phe Thr Asn Tyr Trp Ile His

1 5 10

<210> 46

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR2 of mouse and chimeric 74B4D6 antibodies

<400> 46

Thr Ile Asp Pro Ser Glu Asn Tyr Thr Asn Tyr Asn Gln Lys Phe Lys

1 5 10 15

Gly

<210> 47

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR3 of mouse and chimeric 74B4D6 antibodies

<400> 47

Ser Ser Phe Ser Tyr

1 5

<210> 48

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR1 of mouse and chimeric 74B4D6 antibodies

<400> 48

Ser Ala Ser Ser Ser Val Ser Phe Ile His

1 5 10

<210> 49

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR2 of mouse and chimeric 74B4D6 antibodies

<400> 49

Thr Thr Ser Asn Leu Ala Ser

1 5

<210> 50

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR3 of mouse and chimeric 74B4D6 antibodies

<400> 50

Gln Gln Arg Ser Ser Tyr Pro Leu Thr

1 5

<210> 51

<211> 114

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of mouse and chimeric 74B4D6 antibodies

<400> 51

Glu Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Gly Lys Pro Gly Ala

1 5 10 15

Ser Val Lys Met Ala Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr

20 25 30

Trp Ile His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile

35 40 45

Gly Thr Ile Asp Pro Ser Glu Asn Tyr Thr Asn Tyr Asn Gln Lys Phe

<400> 53

Gly Tyr Ser Phe Thr Ser Ser Trp Met His

1 5 10

<210> 54

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR2 of mouse and chimeric 58A8D1 antibodies

<400> 54

Glu Ile His Pro Asn Ser Gly Asn Thr Asn Tyr Asn Glu Lys Phe Lys

1 5 10 15

Gly

<210> 55

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR3 of mouse and chimeric 58A8D1 antibodies

<400> 55

Ser Pro Tyr Gly Tyr Gly Gly Ser Met Asp Tyr

1 5 10

<210> 56

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR1 of mouse and chimeric 58A8D1 antibodies

<400> 56

Arg Ala Ser Gln Asp Ile His Asn Tyr Leu Asn

1 5 10

<210> 57

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR2 of mouse and chimeric 58A8D1 antibodies

<400> 57

Tyr Thr Ser Arg Leu Tyr Ser

1 5

<210> 58

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR3 of mouse and chimeric 58A8D1 antibodies

<400> 58

Gln Gln Gly Asn Thr Leu Pro Val Met

1 5

<210> 59

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of mouse and chimeric 58A8D1 antibodies

<400> 59

Glu Val Gln Leu Gln Gln Leu Gly Ser Val Leu Val Arg Pro Gly Ile

1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Ser

20 25 30

Trp Met His Trp Thr Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile

35 40 45

Gly Glu Ile His Pro Asn Ser Gly Asn Thr Asn Tyr Asn Glu Lys Phe

<400> 61

Gly Ile Thr Phe Ser Arg Phe Ala Met Ser

1 5 10

<210> 62

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR2 of mouse and chimeric 6G10 antibodies

<400> 62

Thr Ile Ser Ser Gly Asp Met Tyr Thr Tyr Tyr Pro Asp Ser Val Lys

1 5 10 15

Gly

<210> 63

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> VH-CDR3 of mouse and chimeric 6G10 antibodies

<400> 63

Met Ile Thr Thr Gly Glu His Ala Tyr

1 5

<210> 64

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR1 of mouse and chimeric 6G10 antibodies

<400> 64

Arg Ala Ser Gln Asp Ile Ser Val Trp Leu Thr

1 5 10

<210> 65

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR2 of mouse and chimeric 6G10 antibodies

<400> 65

Lys Ala Ser Asn Leu His Thr

1 5

<210> 66

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> VL-CDR3 of mouse and chimeric 6G10 antibodies

<400> 66

Leu Gln Ser Gln Ser Tyr Pro Trp Thr

1 5

<210> 67

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> VH of mouse and chimeric 6G10 antibodies

<400> 67

Glu Val Met Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly

1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe Ser Arg Phe

20 25 30

Ala Met Ser Trp Ile Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val

35 40 45

Ala Thr Ile Ser Ser Gly Asp Met Tyr Thr Tyr Tyr Pro Asp Ser Val

<400> 69

Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys
1				5					10					15	
Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr
			20					25					30		
Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser
		35					40					45			
Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser
	50					55					60				
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
65					70				75					80	
Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
			85					90					95		
Arg	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys
		100						105					110		
Pro	Ala	Pro	Glu	Ala	Ala	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro
	115					120					125				
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys
	130				135					140					
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp
145					150				155					160	
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu
			165					170					175		
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu
		180					185					190			
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn
	195				200						205				
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly
	210				215					220					
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu
225				230				235						240	
Met	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr
			245				250					255			
Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn
		260					265					270			
Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe
	275				280						285				
Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn
	290				295					300					
Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr
305				310				315						320	
Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys						
			325					330							

<210> 70
 <211> 990
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Human IgG1 heavy chain constant region

<400> 70
 gcctctacca agggccctc cgtgttccct ctggctccaa gctctaagtc caccagcgga 60
 ggaacagccg ctctgggctg tctgggtgaag gattatttcc cagagcccg gaccgtgtcc 120
 tggaatagcg gcgccctgac ctccggagtgc catacatttc ccgctgtgct gcagtccagc 180
 ggctgtaca gcctgtcttc cgtggtgacc gtgcctagct ctccctggg caccagaca 240
 tatatctgca atgtgaacca caagccttcc aacacaaagg tggacaagag ggtggagcca 300
 aagagctgtg ataagacca tacatgcccc cttgtcctg ctccagaggc tgctggagga 360
 ccatcctgtg tctgttttcc acccaagccc aaggacaccc tgatgatctc taggaccct 420
 gaggtgacat gcgtgggtgt ggacgtgtcc cacgaggatc cagaggtgaa gtttaattgg 480
 tacgtggatg gcgtggaggt gcataacgt aagaccaagc ctagggagga gcagtacaac 540
 agcacctatc ggggtgtgtc tgtgtctgaca gtgtgcacc aggactggct gaatggcaag 600
 gagtataagt gcaaggtgag caacaaggcc ctgccgctc ctatcgagaa gaccatctct 660
 aaggccaagg gccagcccag agagcctcag gtgtacacac tgcctccaag ccgcgaggag 720
 atgaccaaga atcaggtgtc tctgacatgt ctgggtgaagg gcttctatcc atctgacatc 780
 gctgtggagt gggagtccaa cggccagccc gagaacaatt acaagaccac acccctgtg 840
 ctggactctg atggctcctt ctttctgtat tccaagctga ccgtggataa gagccggtgg 900
 cagcagggca acgtgttctc ctgttccgtg atgcatgagg ccctgcacaa ccattacaca 960
 cagaagagcc tgtctctgtc cccaggcaag 990

<210> 71
 <211> 327
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Human IgG4 heavy chain constant region

<400> 71
 Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
 1 5 10 15
 Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45

<400> 72

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gccagcacia agggaccatc cgtgttccca ctggtccat gctcccggag cacctctgag      60
tccacagccg ctctgggctg tctggtgaag gactacttcc ctgagccagt gaccgtgtcc      120
tggaatagcg gcgcctgac cagcggagtg cacacatttc ctgctgtgct gcagagctct      180
ggcctgtact ctctgtccag cgtggtgacc gtgccatctt ccagcctggg caciaagacc      240
tatacatgca acgtggacca taagccctcc aatacaaagg tggataagag agtggagagc      300
aagtacggac caccttggcc accatgtcca gtcctgagt ttctgggagg accatccgtg      360
ttctgttttc ctccaaagcc taaggacacc ctgatgatct ccaggacccc agaggtgaca      420
tgcgtggtgg tggacgtgag ccaggaggat cctgaggtgc agttcaactg gtacgtggat      480
ggcgtggagg tgcacaatgc taagaccaag cctagagagg agcagtttaa ctccacctac      540
cgcgtggtga gcgtgctgac agtgctgcat caggattggc tgaacggcaa ggagtataag      600
tgcaaggtgt ctaataaggg cctgccatct tccatcgaga agaccatctc caaggccaag      660
ggccagccta gggagccaca ggtgtacaca ctgccccctt ctcaggagga gatgaccaag      720
aaccaggtgt ccctgacatg tctggtgaag ggttctatc ctagcgacat cgctgtggag      780
tgggagtcta atggccagcc agagaacaat tacaagacca caccaccgt gctggactct      840
gatggctcct tctttctgta ttctaggctg accgtggata agtcccgtg gcaggagggc      900
aacgtgttta gctgctctgt gatgcatgag gctctgcaca atcattacac acagaagtc      960
ctgagcctgt ctctgggcaa g

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<210> 73

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Human κ light chain constant region

<400> 73

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Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1          5          10          15
Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
          20          25          30
Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
          35          40          45
Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
          50          55          60
Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65          70          75          80
Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
          85          90          95
Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys

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100

105

<210> 74
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Human κ light chain constant region

<400> 74
 cgcacagtgg ccgctccaag cgtgttcac tttccccctt ctgacgagca gctgaagtct 60
 ggcaccgctt ccgtggtgtg cctgctgaac aatttctacc cccgcgaggc caaggtgcag 120
 tggaaggtgg ataacgctct gcagtcgggc aatagccagg agtctgtgac agagcaggac 180
 tccaaggata gcacctattc tctgtccagc acactgacct tgtctaaggc cgattacgag 240
 aagcacaagg tgtatgcttg cgaggtgaca catcagggcc tgtcttcccc agtgaccaag 300
 tcctttaaca ggggcgagtg t 321

<210> 75
 <211> 575
 <212> PRT
 <213> Homo sapiens

<400> 75
 Met Trp Ser Leu Leu Leu Cys Gly Leu Ser Ile Ala Leu Pro Leu Ser
 1 5 10 15
 Val Thr Ala Asp Gly Cys Lys Asp Ile Phe Met Lys Asn Glu Ile Leu
 20 25 30
 Ser Ala Ser Gln Pro Phe Ala Phe Asn Cys Thr Phe Pro Pro Ile Thr
 35 40 45
 Ser Gly Glu Val Ser Val Thr Trp Tyr Lys Asn Ser Ser Lys Ile Pro
 50 55 60
 Val Ser Lys Ile Ile Gln Ser Arg Ile His Gln Asp Glu Thr Trp Ile
 65 70 75 80
 Leu Phe Leu Pro Met Glu Trp Gly Asp Ser Gly Val Tyr Gln Cys Val
 85 90 95
 Ile Lys Gly Arg Asp Ser Cys His Arg Ile His Val Asn Leu Thr Val
 100 105 110
 Phe Glu Lys His Trp Cys Asp Thr Ser Ile Gly Gly Leu Pro Asn Leu
 115 120 125
 Ser Asp Glu Tyr Lys Gln Ile Leu His Leu Gly Lys Asp Asp Ser Leu
 130 135 140
 Thr Cys His Leu His Phe Pro Lys Ser Cys Val Leu Gly Pro Ile Lys

145		150		155		160									
Trp	Tyr	Lys	Asp	Cys	Asn	Glu	Ile	Lys	Gly	Glu	Arg	Phe	Thr	Val	Leu
			165						170					175	
Glu	Thr	Arg	Leu	Leu	Val	Ser	Asn	Val	Ser	Ala	Glu	Asp	Arg	Gly	Asn
			180						185					190	
Tyr	Ala	Cys	Gln	Ala	Ile	Leu	Thr	His	Ser	Gly	Lys	Gln	Tyr	Glu	Val
		195						200				205			
Leu	Asn	Gly	Ile	Thr	Val	Ser	Ile	Thr	Glu	Arg	Ala	Gly	Tyr	Gly	Gly
		210					215					220			
Ser	Val	Pro	Lys	Ile	Ile	Tyr	Pro	Lys	Asn	His	Ser	Ile	Glu	Val	Gln
225					230					235					240
Leu	Gly	Thr	Thr	Leu	Ile	Val	Asp	Cys	Asn	Val	Thr	Asp	Thr	Lys	Asp
				245					250					255	
Asn	Thr	Asn	Leu	Arg	Cys	Trp	Arg	Val	Asn	Asn	Thr	Leu	Val	Asp	Asp
			260						265					270	
Tyr	Tyr	Asp	Glu	Ser	Lys	Arg	Ile	Arg	Glu	Gly	Val	Glu	Thr	His	Val
		275					280					285			
Ser	Phe	Arg	Glu	His	Asn	Leu	Tyr	Thr	Val	Asn	Ile	Thr	Phe	Leu	Glu
		290					295				300				
Val	Lys	Met	Glu	Asp	Tyr	Gly	Leu	Pro	Phe	Met	Cys	His	Ala	Gly	Val
305					310					315				320	
Ser	Thr	Ala	Tyr	Ile	Ile	Leu	Gln	Leu	Pro	Ala	Pro	Asp	Phe	Arg	Ala
				325						330				335	
Tyr	Leu	Ile	Gly	Gly	Leu	Ile	Ala	Leu	Val	Ala	Val	Ala	Val	Ser	Val
			340						345					350	
Val	Tyr	Ile	Tyr	Asn	Ile	Phe	Lys	Ile	Asp	Ile	Val	Leu	Trp	Tyr	Arg
		355					360					365			
Ser	Ala	Phe	His	Ser	Thr	Glu	Thr	Ile	Val	Asp	Gly	Lys	Leu	Tyr	Asp
		370					375				380				
Ala	Tyr	Val	Leu	Tyr	Pro	Lys	Pro	His	Lys	Glu	Ser	Gln	Arg	His	Ala
385					390					395				400	
Val	Asp	Ala	Leu	Val	Leu	Asn	Ile	Leu	Pro	Glu	Val	Leu	Glu	Arg	Gln
				405						410				415	
Cys	Gly	Tyr	Lys	Leu	Phe	Ile	Phe	Gly	Arg	Asp	Glu	Phe	Pro	Gly	Gln
			420						425					430	
Ala	Val	Ala	Asn	Val	Ile	Asp	Glu	Asn	Val	Lys	Leu	Cys	Arg	Arg	Leu
			435					440				445			
Ile	Val	Ile	Val	Val	Pro	Glu	Ser	Leu	Gly	Phe	Gly	Leu	Leu	Lys	Asn
			450					455				460			
Leu	Ser	Glu	Glu	Gln	Ile	Ala	Val	Tyr	Ser	Ala	Leu	Ile	Gln	Asp	Gly
465					470					475				480	
Met	Lys	Val	Ile	Leu	Ile	Glu	Leu	Glu	Lys	Ile	Glu	Asp	Tyr	Thr	Val
				485						490				495	
Met	Pro	Glu	Ser	Ile	Gln	Tyr	Ile	Lys	Gln	Lys	His	Gly	Ala	Ile	Arg

	500		505		510										
Trp	His	Gly	Asp	Phe	Thr	Glu	Gln	Ser	Gln	Cys	Met	Lys	Thr	Lys	Phe
	515		520		525										
Trp	Lys	Thr	Val	Arg	Tyr	His	Met	Pro	Pro	Arg	Arg	Cys	Arg	Pro	Phe
	530		535		540										
Pro	Pro	Val	Gln	Leu	Leu	Gln	His	Thr	Pro	Cys	Tyr	Arg	Thr	Ala	Gly
545			550		555									560	
Pro	Glu	Leu	Gly	Ser	Arg	Arg	Lys	Lys	Cys	Thr	Leu	Thr	Thr	Gly	
	565		570		575										

<210> 76
 <211> 555
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> hIL36R-ECD mFc

<400> 76

Asp	Gly	Cys	Lys	Asp	Ile	Phe	Met	Lys	Asn	Glu	Ile	Leu	Ser	Ala	Ser
1			5						10					15	
Gln	Pro	Phe	Ala	Phe	Asn	Cys	Thr	Phe	Pro	Pro	Ile	Thr	Ser	Gly	Glu
			20					25					30		
Val	Ser	Val	Thr	Trp	Tyr	Lys	Asn	Ser	Ser	Lys	Ile	Pro	Val	Ser	Lys
		35				40					45				
Ile	Ile	Gln	Ser	Arg	Ile	His	Gln	Asp	Glu	Thr	Trp	Ile	Leu	Phe	Leu
	50				55				60						
Pro	Met	Glu	Trp	Gly	Asp	Ser	Gly	Val	Tyr	Gln	Cys	Val	Ile	Lys	Gly
65				70				75						80	
Arg	Asp	Ser	Cys	His	Arg	Ile	His	Val	Asn	Leu	Thr	Val	Phe	Glu	Lys
			85					90					95		
His	Trp	Cys	Asp	Thr	Ser	Ile	Gly	Gly	Leu	Pro	Asn	Leu	Ser	Asp	Glu
			100					105					110		
Tyr	Lys	Gln	Ile	Leu	His	Leu	Gly	Lys	Asp	Asp	Ser	Leu	Thr	Cys	His
		115				120						125			
Leu	His	Phe	Pro	Lys	Ser	Cys	Val	Leu	Gly	Pro	Ile	Lys	Trp	Tyr	Lys
		130				135					140				
Asp	Cys	Asn	Glu	Ile	Lys	Gly	Glu	Arg	Phe	Thr	Val	Leu	Glu	Thr	Arg
145				150				155						160	
Leu	Leu	Val	Ser	Asn	Val	Ser	Ala	Glu	Asp	Arg	Gly	Asn	Tyr	Ala	Cys
			165					170					175		
Gln	Ala	Ile	Leu	Thr	His	Ser	Gly	Lys	Gln	Tyr	Glu	Val	Leu	Asn	Gly
		180						185					190		

Ile Thr Val Ser Ile Thr Glu Arg Ala Gly Tyr Gly Gly Ser Val Pro		
195	200	205
Lys Ile Ile Tyr Pro Lys Asn His Ser Ile Glu Val Gln Leu Gly Thr		
210	215	220
Thr Leu Ile Val Asp Cys Asn Val Thr Asp Thr Lys Asp Asn Thr Asn		
225	230	235
Leu Arg Cys Trp Arg Val Asn Asn Thr Leu Val Asp Asp Tyr Tyr Asp		
245	250	255
Glu Ser Lys Arg Ile Arg Glu Gly Val Glu Thr His Val Ser Phe Arg		
260	265	270
Glu His Asn Leu Tyr Thr Val Asn Ile Thr Phe Leu Glu Val Lys Met		
275	280	285
Glu Asp Tyr Gly Leu Pro Phe Met Cys His Ala Gly Val Ser Thr Ala		
290	295	300
Tyr Ile Ile Leu Gln Leu Pro Ala Pro Asp Phe Arg Ile Glu Gly Arg		
305	310	315
Met Asp Glu Pro Arg Gly Pro Thr Ile Lys Pro Cys Pro Pro Cys Lys		
325	330	335
Cys Pro Ala Pro Asn Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro		
340	345	350
Pro Lys Ile Lys Asp Val Leu Met Ile Ser Leu Ser Pro Ile Val Thr		
355	360	365
Cys Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser		
370	375	380
Trp Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His		
385	390	395
Arg Glu Asp Tyr Asn Ser Thr Leu Arg Val Val Ser Ala Leu Pro Ile		
405	410	415
Gln His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn		
420	425	430
Asn Lys Asp Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys		
435	440	445
Gly Ser Val Arg Ala Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu		
450	455	460
Glu Met Thr Lys Lys Gln Val Thr Leu Thr Cys Met Val Thr Asp Phe		
465	470	475
Met Pro Glu Asp Ile Tyr Val Glu Trp Thr Asn Asn Gly Lys Thr Glu		
485	490	495
Leu Asn Tyr Lys Asn Thr Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr		
500	505	510
Phe Met Tyr Ser Lys Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg		
515	520	525
Asn Ser Tyr Ser Cys Ser Val Val His Glu Gly Leu His Asn His His		
530	535	540

Thr Thr Lys Ser Phe Ser Arg Thr Pro Gly Lys
 545 550 555

<210> 77
 <211> 553
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> hIL36R-ECD hFc

<400> 77
 Asp Gly Cys Lys Asp Ile Phe Met Lys Asn Glu Ile Leu Ser Ala Ser
 1 5 10 15
 Gln Pro Phe Ala Phe Asn Cys Thr Phe Pro Pro Ile Thr Ser Gly Glu
 20 25 30
 Val Ser Val Thr Trp Tyr Lys Asn Ser Ser Lys Ile Pro Val Ser Lys
 35 40 45
 Ile Ile Gln Ser Arg Ile His Gln Asp Glu Thr Trp Ile Leu Phe Leu
 50 55 60
 Pro Met Glu Trp Gly Asp Ser Gly Val Tyr Gln Cys Val Ile Lys Gly
 65 70 75 80
 Arg Asp Ser Cys His Arg Ile His Val Asn Leu Thr Val Phe Glu Lys
 85 90 95
 His Trp Cys Asp Thr Ser Ile Gly Gly Leu Pro Asn Leu Ser Asp Glu
 100 105 110
 Tyr Lys Gln Ile Leu His Leu Gly Lys Asp Asp Ser Leu Thr Cys His
 115 120 125
 Leu His Phe Pro Lys Ser Cys Val Leu Gly Pro Ile Lys Trp Tyr Lys
 130 135 140
 Asp Cys Asn Glu Ile Lys Gly Glu Arg Phe Thr Val Leu Glu Thr Arg
 145 150 155 160
 Leu Leu Val Ser Asn Val Ser Ala Glu Asp Arg Gly Asn Tyr Ala Cys
 165 170 175
 Gln Ala Ile Leu Thr His Ser Gly Lys Gln Tyr Glu Val Leu Asn Gly
 180 185 190
 Ile Thr Val Ser Ile Thr Glu Arg Ala Gly Tyr Gly Gly Ser Val Pro
 195 200 205
 Lys Ile Ile Tyr Pro Lys Asn His Ser Ile Glu Val Gln Leu Gly Thr
 210 215 220
 Thr Leu Ile Val Asp Cys Asn Val Thr Asp Thr Lys Asp Asn Thr Asn
 225 230 235 240
 Leu Arg Cys Trp Arg Val Asn Asn Thr Leu Val Asp Asp Tyr Tyr Asp

				245						250						255			
Glu	Ser	Lys	Arg	Ile	Arg	Glu	Gly	Val	Glu	Thr	His	Val	Ser	Phe	Arg				
				260						265						270			
Glu	His	Asn	Leu	Tyr	Thr	Val	Asn	Ile	Thr	Phe	Leu	Glu	Val	Lys	Met				
				275					280							285			
Glu	Asp	Tyr	Gly	Leu	Pro	Phe	Met	Cys	His	Ala	Gly	Val	Ser	Thr	Ala				
				290					295							300			
Tyr	Ile	Ile	Leu	Gln	Leu	Pro	Ala	Pro	Asp	Phe	Arg	Ile	Glu	Gly	Arg				
305						310					315					320			
Met	Asp	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro				
				325						330						335			
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys				
				340					345							350			
Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val				
				355					360							365			
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr				
				370					375							380			
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu				
385						390					395					400			
Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His				
				405						410						415			
Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys				
				420					425							430			
Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln				
				435					440							445			
Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu				
				450					455							460			
Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro				
465						470					475					480			
Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn				
				485						490						495			
Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu				
				500					505							510			
Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val				
				515					520							525			
Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln				
				530					535							540			
Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys											
545						550													

<210> 78

<211> 595

<212> PRT

<213> Cynomolgus monkey (*Macaca fascicularis*)

Met	Trp	Ser	Leu	Leu	Cys	Gly	Leu	Ser	Ile	Ala	Leu	Pro	Leu	Ser	
1				5				10					15		
Val	Thr	Ala	Asp	Gly	Cys	Asn	Asp	Ile	Phe	Met	Lys	Asn	Glu	Met	Leu
			20					25				30			
Ser	Ala	Ser	Gln	Pro	Phe	Ala	Phe	Asn	Cys	Thr	Phe	Pro	Pro	Ile	Thr
		35					40				45				
Ser	Gly	Glu	Val	Ser	Val	Thr	Trp	Tyr	Lys	Asn	Ser	Ser	Lys	Ile	Pro
	50					55				60					
Val	Ser	Lys	Ile	Ile	Gln	Ser	Arg	Ile	His	Gln	Asp	Glu	Thr	Trp	Ile
65					70				75					80	
Leu	Phe	Leu	Pro	Met	Glu	Trp	Gly	Asp	Ser	Gly	Val	Tyr	Gln	Cys	Val
			85					90					95		
Ile	Lys	Gly	Arg	Asp	Ser	Cys	His	Arg	Ile	His	Val	Asn	Leu	Thr	Val
			100					105				110			
Phe	Glu	Lys	Gln	Trp	Cys	Asp	Thr	Ser	Val	Lys	Gly	Leu	Pro	Asn	Leu
		115					120				125				
Ser	Asp	Glu	Tyr	Lys	Gln	Ile	Leu	His	Leu	Gly	Lys	Asp	Asp	Ser	Leu
	130					135				140					
Thr	Cys	His	Leu	His	Phe	Pro	Lys	Ser	Cys	Ile	Leu	Gly	Pro	Ile	Lys
145					150				155					160	
Trp	Tyr	Lys	Asp	Cys	Asn	Glu	Ile	Thr	Gly	Glu	Arg	Phe	Thr	Val	Leu
			165					170					175		
Glu	Thr	Arg	Leu	Leu	Val	Ser	Asn	Val	Ser	Ala	Glu	Asp	Arg	Gly	Asn
		180						185				190			
Tyr	Ala	Cys	Gln	Val	Ile	Leu	Thr	His	Ser	Gly	Lys	Gln	Tyr	Glu	Val
	195						200				205				
Leu	Asn	Gly	Ile	Thr	Val	Ser	Ile	Thr	Glu	Arg	Ala	Gly	Tyr	Gly	Gly
	210					215				220					
Ser	Val	Pro	Lys	Ile	Ile	Tyr	Pro	Lys	Asn	Asn	Ser	Ile	Glu	Val	Gln
225					230				235					240	
Leu	Gly	Thr	Thr	Leu	Ile	Val	Asp	Cys	Asn	Ile	Thr	Asp	Thr	Lys	Asp
			245					250				255			
Asn	Thr	Asn	Leu	Arg	Cys	Trp	Arg	Val	Asn	Asn	Thr	Leu	Val	Asp	Asp
		260						265				270			
Tyr	Tyr	Asn	Glu	Ser	Lys	Arg	Ile	Arg	Glu	Gly	Val	Glu	Thr	His	Ala
	275						280				285				
Ser	Phe	Arg	Glu	Tyr	Asn	Leu	Tyr	Thr	Val	Asn	Ile	Thr	Phe	Leu	Glu
	290					295				300					
Val	Lys	Met	Glu	Asp	Tyr	Gly	Leu	Pro	Phe	Met	Cys	His	Ala	Gly	Val
305					310				315					320	
Ser	Ala	Ala	Tyr	Ile	Met	Leu	Gln	Leu	Pro	Ala	Pro	Asp	Phe	Arg	Ala
			325					330					335		

Tyr Leu Ile Gly Gly Leu Ile Ala Phe Leu Ala Val Ala Val Ser Val
340 345 350
Val Tyr Ile Tyr Asn Ile Phe Lys Ile Asp Ile Val Leu Trp Tyr Arg
355 360 365
Ser Thr Phe Gln Ser Thr Glu Thr Leu Glu Asp Gly Lys Leu Tyr Asp
370 375 380
Ala Tyr Val Leu Tyr Pro Lys Pro Arg Arg Glu Ser Gln Arg His Ala
385 390 395 400
Val Asp Thr Leu Val Leu Lys Ile Leu Pro Glu Val Leu Glu Arg Gln
405 410 415
Cys Gly Tyr Lys Leu Phe Ile Phe Gly Arg Asp Glu Phe Pro Gly Gln
420 425 430
Ala Val Ala Asn Val Ile Asp Glu Asn Val Lys Leu Cys Arg Arg Leu
435 440 445
Ile Val Ile Val Val Pro Glu Ser Leu Gly Phe Gly Leu Leu Lys Asn
450 455 460
Leu Ser Glu Glu Gln Ile Ala Val Tyr Asn Ala Leu Ile Gln Asp Gly
465 470 475 480
Met Lys Val Ile Leu Ile Glu Leu Glu Lys Ile Glu Asp Tyr Thr Ala
485 490 495
Met Pro Glu Ser Ile Gln Tyr Ile Arg Gln Lys His Gly Val Ile Arg
500 505 510
Trp His Gly Asp Phe Thr Glu Gln Ser Gln Cys Val Lys Thr Lys Phe
515 520 525
Trp Lys Thr Val Arg Tyr His Met Pro Pro Arg Arg Cys Arg Pro Ser
530 535 540
Pro Pro Val Gln Leu Pro Gln His Thr Pro Cys Tyr Arg Thr Thr Gly
545 550 555 560
Glu Arg Val Gly Gly His Lys Val Arg His Ala Leu Met Glu Gly Leu
565 570 575
Ser Leu Arg Gly Gly Ser Gln Leu Glu Glu Asp Thr Phe His Arg Gly
580 585 590
Arg Pro Leu
595

<210> 79
<211> 555
<212> PRT
<213> Artificial Sequence

<220>
<223> CynoIL36R-ECD mFc

Asp 1	Gly	Cys	Asn	Asp 5	Ile	Phe	Met	Lys	Asn	Glu	Met	Leu	Ser	Ala	Ser
Gln	Pro	Phe	Ala	Phe	Asn	Cys	Thr	Phe	Pro	Pro	Ile	Thr	Ser	Gly	Glu
Val	Ser	Val	Thr	Trp	Tyr	Lys	Asn	Ser	Ser	Lys	Ile	Pro	Val	Ser	Lys
Ile	Ile	Gln	Ser	Arg	Ile	His	Gln	Asp	Glu	Thr	Trp	Ile	Leu	Phe	Leu
Pro	Met	Glu	Trp	Gly	Asp	Ser	Gly	Val	Tyr	Gln	Cys	Val	Ile	Lys	Gly
Arg	Asp	Ser	Cys	His	Arg	Ile	His	Val	Asn	Leu	Thr	Val	Phe	Glu	Lys
Gln	Trp	Cys	Asp	Thr	Ser	Val	Lys	Gly	Leu	Pro	Asn	Leu	Ser	Asp	Glu
Tyr	Lys	Gln	Ile	Leu	His	Leu	Gly	Lys	Asp	Asp	Ser	Leu	Thr	Cys	His
Leu	His	Phe	Pro	Lys	Ser	Cys	Ile	Leu	Gly	Pro	Ile	Lys	Trp	Tyr	Lys
Asp	Cys	Asn	Glu	Ile	Thr	Gly	Glu	Arg	Phe	Thr	Val	Leu	Glu	Thr	Arg
Leu	Leu	Val	Ser	Asn	Val	Ser	Ala	Glu	Asp	Arg	Gly	Asn	Tyr	Ala	Cys
Gln	Val	Ile	Leu	Thr	His	Ser	Gly	Lys	Gln	Tyr	Glu	Val	Leu	Asn	Gly
Ile	Thr	Val	Ser	Ile	Thr	Glu	Arg	Ala	Gly	Tyr	Gly	Gly	Ser	Val	Pro
Lys	Ile	Ile	Tyr	Pro	Lys	Asn	Asn	Ser	Ile	Glu	Val	Gln	Leu	Gly	Thr
Thr	Leu	Ile	Val	Asp	Cys	Asn	Ile	Thr	Asp	Thr	Lys	Asp	Asn	Thr	Asn
Leu	Arg	Cys	Trp	Arg	Val	Asn	Asn	Thr	Leu	Val	Asp	Asp	Tyr	Tyr	Asn
Glu	Ser	Lys	Arg	Ile	Arg	Glu	Gly	Val	Glu	Thr	His	Ala	Ser	Phe	Arg
Glu	Tyr	Asn	Leu	Tyr	Thr	Val	Asn	Ile	Thr	Phe	Leu	Glu	Val	Lys	Met
Glu	Asp	Tyr	Gly	Leu	Pro	Phe	Met	Cys	His	Ala	Gly	Val	Ser	Ala	Ala
Tyr	Ile	Met	Leu	Gln	Leu	Pro	Ala	Pro	Asp	Phe	Arg	Ile	Glu	Gly	Arg
Met	Asp	Glu	Pro	Arg	Gly	Pro	Thr	Ile	Lys	Pro	Cys	Pro	Pro	Cys	Lys
Cys	Pro	Ala	Pro	Asn	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Ile	Phe	Pro

	340		345		350										
Pro	Lys	Ile	Lys	Asp	Val	Leu	Met	Ile	Ser	Leu	Ser	Pro	Ile	Val	Thr
	355		360		365										
Cys	Val	Val	Val	Asp	Val	Ser	Glu	Asp	Asp	Pro	Asp	Val	Gln	Ile	Ser
	370		375		380										
Trp	Phe	Val	Asn	Asn	Val	Glu	Val	His	Thr	Ala	Gln	Thr	Gln	Thr	His
385			390		395									400	
Arg	Glu	Asp	Tyr	Asn	Ser	Thr	Leu	Arg	Val	Val	Ser	Ala	Leu	Pro	Ile
	405		410		415										
Gln	His	Gln	Asp	Trp	Met	Ser	Gly	Lys	Glu	Phe	Lys	Cys	Lys	Val	Asn
	420		425		430										
Asn	Lys	Asp	Leu	Pro	Ala	Pro	Ile	Glu	Arg	Thr	Ile	Ser	Lys	Pro	Lys
	435		440		445										
Gly	Ser	Val	Arg	Ala	Pro	Gln	Val	Tyr	Val	Leu	Pro	Pro	Pro	Glu	Glu
	450		455		460										
Glu	Met	Thr	Lys	Lys	Gln	Val	Thr	Leu	Thr	Cys	Met	Val	Thr	Asp	Phe
465			470		475									480	
Met	Pro	Glu	Asp	Ile	Tyr	Val	Glu	Trp	Thr	Asn	Asn	Gly	Lys	Thr	Glu
	485		490		495										
Leu	Asn	Tyr	Lys	Asn	Thr	Glu	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Tyr
	500		505		510										
Phe	Met	Tyr	Ser	Lys	Leu	Arg	Val	Glu	Lys	Lys	Asn	Trp	Val	Glu	Arg
	515		520		525										
Asn	Ser	Tyr	Ser	Cys	Ser	Val	Val	His	Glu	Gly	Leu	His	Asn	His	His
	530		535		540										
Thr	Thr	Lys	Ser	Phe	Ser	Arg	Thr	Pro	Gly	Lys					
545			550		555										

<210> 80
 <211> 553
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> CynoIL36R-ECD hFc

<400>	80														
Asp	Gly	Cys	Asn	Asp	Ile	Phe	Met	Lys	Asn	Glu	Met	Leu	Ser	Ala	Ser
1			5					10					15		
Gln	Pro	Phe	Ala	Phe	Asn	Cys	Thr	Phe	Pro	Pro	Ile	Thr	Ser	Gly	Glu
	20							25					30		
Val	Ser	Val	Thr	Trp	Tyr	Lys	Asn	Ser	Ser	Lys	Ile	Pro	Val	Ser	Lys
	35						40					45			

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
 405 410 415
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 420 425 430
 Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
 435 440 445
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
 450 455 460
 Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
 465 470 475 480
 Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 485 490 495
 Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
 500 505 510
 Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
 515 520 525
 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 530 535 540
 Lys Ser Leu Ser Leu Ser Pro Gly Lys
 545 550

<210> 81
 <211> 449
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Heavy chain of BI655130

<400> 81
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Ser
 20 25 30
 Trp Ile His Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Glu Ile Asn Pro Gly Asn Val Arg Thr Asn Tyr Asn Glu Asn Phe
 50 55 60
 Arg Asn Lys Val Thr Met Thr Val Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Thr Val Val Phe Tyr Gly Glu Pro Tyr Phe Pro Tyr Trp Gly Gln Gly

<210> 82
 <211> 1347
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Heavy chain of BI655130

<400> 82
 caggtgcagc tgggtgcagtc tggcgccgag gtgaagaagc caggcgctag cgtgaaggtg 60
 tcttgcaagg ccageggcta ctctttcacc tccagctgga tccactgggt gaagcaggt 120
 ccaggacagg gactggagtg gatgggcgag atcaatcctg gcaacgtgag aacaaactac 180
 aatgagaact ttcgcaataa ggtgaccatg acagtggaca ccagcatctc tacagcctat 240
 atggagctgt ccaggctgcg gagcgacgat accgccgtgt actattgcac agtgggtgttc 300
 tacggcgagc catactttcc ctattggggc cagggcaccc tggtgacagt gtcttccgcc 360
 tctaccaagg gcccctccgt gttccctctg gctccaagct ctaagtccac cagcggagga 420
 acagccgctc tgggctgtct ggtgaaggat tatttcccag agcccgtgac cgtgtcctgg 480
 aatagcggcg ccctgacctc cggagtgcac acatttcccg ctgtgctgca gtccagcggc 540
 ctgtacagcc tgtcttccgt ggtgaccgtg cctagctctt ccttgggcac ccagacatat 600
 atctgcaatg tgaaccacaa gccttccaac acaaagggtg acaagagggt ggagccaaag 660
 agctgtgata agaccatac atgccccct tgtcctgctc cagaggctgc tggaggacca 720
 tccgtgttcc tgtttccacc caagcccaag gacaccctga tgatctctag gaccctgag 780
 gtgacatgcg tgggtggtgga cgtgtccac gaggatccag aggtgaagtt taattggtac 840
 gtggatggcg tggaggtgca taacgctaag accaagccta gggaggagca gtacaacagc 900
 acctatcggg tgggtgtctgt gctgacagtg ctgcaccagg actggctgaa tggcaaggag 960
 tataagtgca aggtgagcaa caaggccctg cccgtccta tcgagaagac catctctaag 1020
 gccaagggcc agcccagaga gcctcaggtg tacacactgc ctccaagccg cgaggagatg 1080
 accaagaatc aggtgtctct gacatgtctg gtgaagggt tctatccatc tgacatcgct 1140
 gtggagtggg agtccaacgg ccagcccag aacaattaca agaccacacc ccctgtgctg 1200
 gactctgatg gctccttctt tctgtattcc aagctgaccg tggataagag ccggtggcag 1260
 cagggcaacg tgttctcctg ttccgtgatg catgaggccc tgcacaacca ttacacacag 1320
 aagagcctgt ctctgtcccc aggcaag 1347

<210> 83
 <211> 215
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Light chain of BI655130

<400> 83

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

<210> 84

<211> 645

<212> DNA

<213> Artificial Sequence

<220>

<223> Light chain of BI655130

<400> 84

cagatcgtgc tgacacagag ccctggcacc ctgagcctgt ctccaggaga gagggccacc 60
atgacatgca ccgcttccag ctccgtgtcc agctcttact tccactggta tcagcagaag 120
ccaggacagg ctccaaggct gtggatctac aggacctcca ggctggctag cggagtgcct 180

gaccggttct ccggaagcgg atctggcaca gatttcaccc tgaccatctc cagactggag	240
cccgaggacg ccgctaccta ctattgccac cagttccata gaagccctct gacatttggc	300
gccggcacca agctggagat caagcgcaca gtggccgctc caagcgtgtt catctttccc	360
ccttctgacg agcagctgaa gtctggcacc gcttcctggg tgtgectgct gaacaatttc	420
tacccccgcg aggccaaggt gcagtggaag gtggataacg ctctgcagtc cggcaatagc	480
caggagtctg tgacagagca ggactccaag gatagcacct attctctgtc cagcacactg	540
accctgtcta aggccgatta cgagaagcac aaggtgtatg cttgcgaggt gacacatcag	600
ggcctgtctt ccccgatgac caagtccttt aacaggggcg agtgt	645

<210> 85

<211> 5

<212> PRT

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Arg Phe Ala Met Ser

1 5