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<120> MEDICAMENT COMPRISING ANTI PHOSPHOLIPASE D4 ANTIBODY

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<150> JP 2013-158258
<151> 2013-07-30

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Pro Lys Asp Val Pro Arg Ser Trp Glu His Gly Ser Ser Pro Ala Trp
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Val Leu Val Glu Ser Ile Pro Gln Asp Leu Pro Ser Ala Ala Gly Ser
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tccagagttc caggtcactg tcac 24

<210> 67
<211> 24
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 67
aggggccagt ggatagacag atgg 24

<210> 68
<211> 24
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 68
tccagagttc caagtcacag tcac 24

<210> 69
<211> 24
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 69
aggggccagt ggatagactg atgg 24

<210> 70
<211> 36
<212> DNA
<213> Artificial

<220>
<223> anchor primer

<220>
<221> misc_feature
<222> (24)..(25)
<223> n is deoxyisosine.

<220>
<221> misc_feature

<222> (29)..(30)
<223> n is deoxyisosine.

<220>
<221> misc_feature
<222> (34)..(35)
<223> n is deoxyisosine.

<400> 70
ggccacgcgt cgactagtac gggnngggnn gggnng 36

<210> 71
<211> 20
<212> DNA
<213> Artificial

<220>
<223> AUAP primer

<400> 71
ggccacgcgt cgactagtac 20

<210> 72
<211> 31
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 72
cactacttcc tgttgaagct cttgacgatg g 31

<210> 73
<211> 23
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 73
gtgagtggcc tcacaggtat agc 23

<210> 74
<211> 504
<212> DNA
<213> Mus musculus

<400> 74
atgagatcac agttctctat acagttactg agcacacaga acctcacctt gggatggagc 60

tgtatcatcc tcttcttggt agcaacagct acaggtgtcc actcccaggt ccaactgcag 120

cagcctgggg ctgaactggt gaagcctggg acttcagtga aaatgtcctg caaggcttct 180

ggctacacct tcaccagcta ctggatgcac tgggtgaagc agaggccggg acaaggcctt 240

gagtggattg gagatattta tcctggtagt gatagtacta actacaatga gaagttcaag 300

agcaaggcca cactgactgt agacacatcc tccagcacag cctacatgca actcagcagc 360

ctgacatctg aggactctgc ggtctattac tgtgcaagag gagggtggtt ggatgctatg 420

gactactggg gtcaaggaac ctcagtcacc gtctcctcag ccaaaacaac accccccatca 480

gtctatccac tggcccctaa gggc 504

<210> 75
<211> 168
<212> PRT
<213> Mus musculus

<400> 75

Met Arg Ser Gln Phe Ser Ile Gln Leu Leu Ser Thr Gln Asn Leu Thr
1 5 10 15

Leu Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
20 25 30

Val His Ser Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys
35 40 45

Pro Gly Thr Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe
50 55 60

Thr Ser Tyr Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu
65 70 75 80

Glu Trp Ile Gly Asp Ile Tyr Pro Gly Ser Asp Ser Thr Asn Tyr Asn
85 90 95

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

Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
115 120 125

Tyr Tyr Cys Ala Arg Gly Gly Trp Leu Asp Ala Met Asp Tyr Trp Gly
130 135 140

Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser
145 150 155 160

Val Tyr Pro Leu Ala Pro Lys Gly
165

<210> 76
<211> 437
<212> DNA
<213> Mus musculus

<400> 76
atggaatgta actggatact tccttttatt ctgtcggtaa tttcaggggt ctcctcagag 60

gttcagctcc agcagtctgg gactgtgctg tcaaggcctg gggcttccgt gacgatgtcc 120

tgcaaggctt ctggcgacag ctttaccacc tactggatgc actgggtaaa acagaggcct 180

ggacagggtc tagaatggat tggtgctatc tatcctggaa atagtgaaac tagctacaac 240

cagaagttca agggcaaggc caaactgact gcagtcacat ccgccagcac tgcctatatg 300

gagttcacta gcctgacaaa tgaggactct gcggtctatt actgtacggg gggttattcc 360

gactttgact actggggcca aggcaccact ctcacagtct cctcagccaa aacgacaccc 420

ccatctgtct atccact 437

<210> 77
<211> 145
<212> PRT
<213> Mus musculus

<400> 77

Met Glu Cys Asn Trp Ile Leu Pro Phe Ile Leu Ser Val Ile Ser Gly
1 5 10 15

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

Pro Gly Ala Ser Val Thr Met Ser Cys Lys Ala Ser Gly Asp Ser Phe
35 40 45

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

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

Gln Lys Phe Lys Gly Lys Ala Lys Leu Thr Ala Val Thr Ser Ala Ser
85 90 95

Thr Ala Tyr Met Glu Phe Thr Ser Leu Thr Asn Glu Asp Ser Ala Val
100 105 110

Tyr Tyr Cys Thr Gly Gly Tyr Ser Asp Phe Asp Tyr Trp Gly Gln Gly
115 120 125

Thr Thr Leu Thr Val Ser Ser Ala Lys Thr Thr Pro Pro Ser Val Tyr
130 135 140

Pro
145

<210> 78
<211> 475
<212> DNA
<213> Mus musculus

<400> 78
atgggatgga gctggatctt tctcttcctc ctgtcaggaa ctgcaggcgt ccactctgag 60

gtccagcttc agcagtcagg acctgaactg gtgaaacctg gggcctcagt gaagatatcc 120

tgcaaggctt ctggatacac attcactgac tacaacttgc actgggtgaa gcagagccat 180

ggaaagagcc ttgagtggat tggatatatt tatccttaca atggtaatac tggctacaac 240

cagaagttca agaggaaggc cacattgact gtagacaatt cctccggcac agtctacatg 300

gagctccgca gcctgacatc tgaggactct gcagtctatt actgtgcaag aggagggatc 360

tatgatgatt actacgacta tgctatcgac tattggggtc aaggaacctc agtcaccgtc 420

tcctcagcca aaacaacacc cccatcagtc tatccactgg cccctaaggg cgaat 475

<210> 79
<211> 158
<212> PRT
<213> Mus musculus

<400> 79

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

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

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

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

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

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

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

Tyr Tyr Cys Ala Arg Gly Gly Ile Tyr Asp Asp Tyr Tyr Asp Tyr Ala
115 120 125

Ile Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys
130 135 140

Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Lys Gly Glu
145 150 155

<210> 80
<211> 470
<212> DNA
<213> Mus musculus

<400> 80
atgggatgga gctggatctt tctcttcctc ctgtcaggaa ctgcaggcgt ccactctgag 60

gtccagcttc agcagtcagg acctgaactg gtgaaacctg gggcctcagt gaagatatcc 120

tgcaaggctt ctggatacac attcactgac tacaacttgc actgggtgaa gcagagccat 180

ggaaagagcc ttgagtggat tggatatatt tatccttaca atggtaatac tggctacaac 240

cagaagttca agaggaaggc cacattgact gtagacaatt cctccggcac agtctacatg 300

gagctccgca gcctgacatc tgaggactct gcagtctatt actgtgcaag aggagggatc 360

tatgatgatt actacgacta tgctatcgac tattggggtc aaggaacctc agtcaccgtc 420

tcctcagcca aaacaacacc cccatcagtc tatccactgg cccctaaggg 470

<210> 81
<211> 156
<212> PRT

<213> Mus musculus

<400> 81

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

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

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

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

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

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

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

Tyr Tyr Cys Ala Arg Gly Gly Ile Tyr Asp Asp Tyr Tyr Asp Tyr Ala
115 120 125

Ile Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys
130 135 140

Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Lys
145 150 155

<210> 82
<211> 462
<212> DNA
<213> Mus musculus

<400> 82
atgggatgga gctatatcat cctcttttttg gtagcaacag caacaggggt ccactcccag 60

gtccaactgc agcagtcggg ggctgaactg gtgaagcctg gggcttcagt gaagttgtcc 120

tgcaaggctt ctggctacac cttcaccagc tactatttgt actgggtgag gcagaggcct 180

ggacaaggcc ttgagtggat tggactgatt aatcctacca atagtgatac tatcttcaat 240

gagaagttca agagcaaggc cacactgact gtagacaaat cctccagcac agcatacatg 300

caactcagca gcctgacatc tgaggactct gcggtctatt actgtacacg agaggggga 360

tatggttacg gcccgtttgc ttactggggc caagggactc tggtcactgt ctctgcagcc 420

aaaacaacac ccccatcagt ctatccactg gcccctaagg gc 462

<210> 83
<211> 154
<212> PRT
<213> Mus musculus

<400> 83

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

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

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

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

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

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

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

Tyr Tyr Cys Thr Arg Glu Gly Gly Tyr Gly Tyr Gly Pro Phe Ala Tyr
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala Ala Lys Thr Thr Pro
130 135 140

Pro Ser Val Tyr Pro Leu Ala Pro Lys Gly
145 150

<210> 84
<211> 450

<212> DNA
<213> Mus musculus

<400> 84
atgaacttcg ggctcagctt gattttcctt gccctcattt taaaaggtgt ccagtgtgag 60

gtgcagctgg tggagtctgg gggagactta gtgaggcctg gagggtccct gaaactctcc 120

tgtgcagcct ctggattcag tttcagtagc tatggcatgt cttggtttcg ccagactcca 180

gacaagaggc tggagtgggt cgcaaccatt agtagtggtg gtagttacat ctactatcca 240

gaaagtgtga aggggcgatt caccatctcc agagacaatg ccaggaacat cctgtacctg 300

caaatgagca gtctgaagtc tgaggacaca gccatgtatt attgtgtaag actctacggt 360

ggtaggagag gctatggttt ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 420

gccaaaacaa cagccccatc ggtctatcca 450

<210> 85
<211> 150
<212> PRT
<213> Mus musculus

<400> 85

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

Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Arg
20 25 30

Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe
35 40 45

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

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

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

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

Tyr Tyr Cys Val Arg Leu Tyr Gly Gly Arg Arg Gly Tyr Gly Leu Asp
115 120 125

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys Thr Thr
130 135 140

Ala Pro Ser Val Tyr Pro
145 150

<210> 86
<211> 450
<212> DNA
<213> Mus musculus

<400> 86
atgaacttcg ggctcagctt gattttcctt gccctcattt taaaaggtgt ccagtgtgag 60

gtgcagctgg tggagtctgg gggagactta gtgaggcctg gagggtccct gaaactctcc 120

tgtgcagcct ctggattcag tttcagtagc tatggcatgt cttggtttcg ccagactcca 180

gacaagaggc tggagtgggt cgcaaccatt agtagtggtg gtagttacat ctactatcca 240

gaaagtgtga aggggcgatt caccatctcc agagacaatg ccaggaacat cctgtacctg 300

caaatgagca gtctgaagtc tgaggacaca gccatgtatt attgtgtaag actctacggt 360

ggtaggagag gctatggttt ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 420

gccaaaacaa cacccccatc agtctatcca 450

<210> 87
<211> 150
<212> PRT
<213> Mus musculus

<400> 87

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

Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Arg
20 25 30

Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe
35 40 45

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

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

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

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

Tyr Tyr Cys Val Arg Leu Tyr Gly Gly Arg Arg Gly Tyr Gly Leu Asp
115 120 125

Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Lys Thr Thr
130 135 140

Pro Pro Ser Val Tyr Pro
145 150

<210> 88
<211> 472
<212> DNA
<213> Mus musculus

<400> 88
atgaaagtgt tgagtctgtt gtacctgttg acagccattc ctggtatcct gtctgatgta 60

cagcttcagg agtcaggacc tggcctcgtg aaaccttctc aatctctgtc tctcacctgc 120

tctgtcactg gctactccat caccagtcat tattactgga cctggatccg gcagtttcca 180

ggaaacaaac tggaatggat gggctacata agctacgacg gtagcaataa ctacaaccca 240

tctctcaaaa atcgaatctc catcactcgt gacacatcta agaaccagtt tttcctgaag 300

ttgaattctg tgactactga ggacacagct acatataact gtgcaagaga gggcccgctc 360

tactatggta acccctactg gtatttcgat gtctggggcg cagggaccac ggtcaccgtc 420

tcctcagcca aaacaacacc cccatcagtc tatccactgg cccctaaggg cg 472

<210> 89
<211> 157
<212> PRT
<213> Mus musculus

<400> 89

Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
1 5 10 15

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

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

Ser His Tyr Tyr Trp Thr Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu
50 55 60

Glu Trp Met Gly Tyr Ile Ser Tyr Asp Gly Ser Asn Asn Tyr Asn Pro
65 70 75 80

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

Phe Phe Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr
100 105 110

Asn Cys Ala Arg Glu Gly Pro Leu Tyr Tyr Gly Asn Pro Tyr Trp Tyr
115 120 125

Phe Asp Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser Ala Lys
130 135 140

Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Lys Gly
145 150 155

<210> 90
<211> 471
<212> DNA
<213> Mus musculus

<400> 90
atgaaagtgt tgagtctgtt gtacctgttg acagccattc ctggtatcct gtctgatgta 60

cagcttcagg agtcaggacc tggcctcgtg aaaccttctc agtctctgtc tctcacctgc 120

tctgtcactg gctactccat ctccagtcat tattactgga gttggatccg gcagtttcca 180

ggaaacagac tggaatggat gggctacata agctacgacg gtagcaataa ctacaaccca 240

tctctcaaaa atcgaatctc catcactcgt gacacatcta agaaccagtt tttcctgaag 300

ttgaattctg tgactactga ggacacagct acatataact gtgcaagaga gggcccgctc 360

tactatggta acccctactg gtatttcgat gtctggggcg cagggaccac ggtcaccgtc 420

tcctcagcca aaacaacacc cccatcagtc tatccactgg cccctaaggg c 471

<210> 91

<211> 157
<212> PRT
<213> Mus musculus

<400> 91

Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
1 5 10 15

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

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

Ser His Tyr Tyr Trp Ser Trp Ile Arg Gln Phe Pro Gly Asn Arg Leu
50 55 60

Glu Trp Met Gly Tyr Ile Ser Tyr Asp Gly Ser Asn Asn Tyr Asn Pro
65 70 75 80

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

Phe Phe Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr
100 105 110

Asn Cys Ala Arg Glu Gly Pro Leu Tyr Tyr Gly Asn Pro Tyr Trp Tyr
115 120 125

Phe Asp Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser Ala Lys
130 135 140

Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Lys Gly
145 150 155

<210> 92
<211> 470
<212> DNA
<213> Mus musculus

<400> 92
atgaaagtgt tgagtctgtt gtacctgttg acagccattc ctggtatcct gtctgatgta 60

cagcttcagg agtcaggacc tggcctcgtg aaaccttctc agtctctgtc tctcacctgc 120

tctgtcactg gctactccat ctccagtcat tattactgga gttggatccg gcagtttcca 180

ggaaacagac tggaatggat gggctacata agctacgacg gtagcaataa ctacaaccca 240

tctctcaaaa atcgaatctc catcactcgt gacacatcta agaaccagtt tttcctgaag 300

ttgaattctg tgactactga ggacacagct acatataact gtgcaagaga gggcccgctc 360

tactatggta acccctactg gtatttcgat gtctggggcg cagggaccac ggtcaccgtc 420

tcctcagcca aaacgacacc cccatctgtc tatccactgg cccctaaggg 470

<210> 93
<211> 156
<212> PRT
<213> Mus musculus

<400> 93

Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
1 5 10 15

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

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

Ser His Tyr Tyr Trp Ser Trp Ile Arg Gln Phe Pro Gly Asn Arg Leu
50 55 60

Glu Trp Met Gly Tyr Ile Ser Tyr Asp Gly Ser Asn Asn Tyr Asn Pro
65 70 75 80

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

Phe Phe Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr
100 105 110

Asn Cys Ala Arg Glu Gly Pro Leu Tyr Tyr Gly Asn Pro Tyr Trp Tyr
115 120 125

Phe Asp Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser Ala Lys
130 135 140

Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Lys
145 150 155

<210> 94
<211> 421
<212> DNA
<213> Mus musculus

<400> 94
atgatgtcct ctgctcagtt ccttggtctc ctgttgctct gttttcaagg taccagatgt 60

gatatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 120

atcagttgca gggcaagtca ggacattagc aattatttaa actggtatca gcagaaacca 180

gatggaactg ttaaactcct gatctactac acatcaagat tacactcagg agtcccatca 240

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 300

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtggac gttcggtgga 360

ggcaccaagc tggaaatcaa acgggctgat gctgcaccaa ctgtatccat caagggcgaa 420

t 421

<210> 95
<211> 140
<212> PRT
<213> Mus musculus

<400> 95

Met Met Ser Ser Ala Gln Phe Leu Gly Leu Leu Leu Leu Cys Phe Gln
1 5 10 15

Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
20 25 30

Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
35 40 45

Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
50 55 60

Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser
85 90 95

Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn
100 105 110

Thr Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Asp Ala Ala Pro Thr Val Ser Ile Lys Gly Glu
130 135 140

<210> 96
<211> 459
<212> DNA
<213> Mus musculus

<400> 96
atgatggtcc ttgctcagtt tcttgcattc ttgttgcttt ggtttccagg tgcaggatgt 60

gacatcctga tgacccaatc tccatcctcc atgtctgtat ctctgggaga cacagtcagc 120

atcacttgcc atgcaagtca gggcattaga agtaatatag ggtggttgca gcagaaacca 180

gggaaatcat ttaagggcct gatctttcat ggaaccaact tggaagatgg agttccatca 240

aggttcagtg gcagaggatc tggagcagat tattctctca ccatcaacag cctggaatct 300

gaagattttg cagactatta ctgtgtacag tatgttcagt ttcctccaac gttcggctcg 360

gggacaaagt tggaaataag acgggctgat gctgcaccaa ctgtatccat cttcccacca 420

tccagtgagc agttaacatc tggaggtgcc tcagtcgtg 459

<210> 97
<211> 153
<212> PRT
<213> Mus musculus

<400> 97

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

Gly Ala Gly Cys Asp Ile Leu Met Thr Gln Ser Pro Ser Ser Met Ser
20 25 30

Val Ser Leu Gly Asp Thr Val Ser Ile Thr Cys His Ala Ser Gln Gly
35 40 45

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

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

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

Ser Leu Glu Ser Glu Asp Phe Ala Asp Tyr Tyr Cys Val Gln Tyr Val
100 105 110

Gln Phe Pro Pro Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Arg Arg
115 120 125

Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln
130 135 140

Leu Thr Ser Gly Gly Ala Ser Val Val
145 150

<210> 98
<211> 467
<212> DNA
<213> Mus musculus

<400> 98
atgagtgtgc ccactcaggt cctggggttg ctgctgctgt ggcttacaga tgccagatgt 60

gacatccaga tgactcagtc tccagcctcc ctatctgtat ctgtgggaga aactgtcgcc 120

atcacatgtc gagcaagtga gaatatttac agtcatatag catggtatca gcagaaagag 180

ggaaaatctc ctcagcgcct ggtctatggt gcaacaaact tagcacatgg tgtgccatca 240

aggttcagtg gcagtggatc aggcacacag tattccctca agatcaacag ccttcagtct 300

gaagattttg ggagttatta ctgtcaacat ttttggggta ctccgtggac gttcggtgga 360

ggcaccaagc tggaaatcaa acgggctgat gctgcaccaa ctgtatccat cttcccacca 420

tccagtgagc agttaacatc tggaggtgcc tcagtcgtgt gcttctt 467

<210> 99
<211> 155
<212> PRT
<213> Mus musculus

<400> 99

Met Ser Val Pro Thr Gln Val Leu Gly Leu Leu Leu Leu Trp Leu Thr
1 5 10 15

Asp Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser
20 25 30

Val Ser Val Gly Glu Thr Val Ala Ile Thr Cys Arg Ala Ser Glu Asn
35 40 45

Ile Tyr Ser His Ile Ala Trp Tyr Gln Gln Lys Glu Gly Lys Ser Pro
50 55 60

Gln Arg Leu Val Tyr Gly Ala Thr Asn Leu Ala His Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn
85 90 95

Ser Leu Gln Ser Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp
100 105 110

Gly Thr Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln
130 135 140

Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe
145 150 155

<210> 100
<211> 454
<212> DNA
<213> Mus musculus

<400> 100
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gacatccaga tgactcagtc tccagcctcc ctatctgtat ctgtgggaga aactgtcgcc 120

atcacatgtc gagcaagtga gaatatttac agtcatatag catggtatca gcagaaagag 180

ggaaaatctc ctcagcgcct ggtctatggt gcaacaaact tagcacatgg tgtgccatca 240

aggttcagtg gcagtggatc aggcacacag tattccctca agatcaacag ccttcagtct 300

gaagattttg ggagttatta ctgtcaacat ttttggggta ctccgtggac gttcggtgga 360

ggcaccaagc tggaaatcaa acgggctgat gctgcaccaa ctgtatccat cttcccacca 420

tccagtgagc agttaacatc tggaggtgcc tcag 454

<210> 101
<211> 151
<212> PRT

<213> Mus musculus

<400> 101

Met Ser Val Pro Thr Gln Val Leu Gly Leu Leu Leu Leu Trp Leu Thr
1 5 10 15

Asp Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser
20 25 30

Val Ser Val Gly Glu Thr Val Ala Ile Thr Cys Arg Ala Ser Glu Asn
35 40 45

Ile Tyr Ser His Ile Ala Trp Tyr Gln Gln Lys Glu Gly Lys Ser Pro
50 55 60

Gln Arg Leu Val Tyr Gly Ala Thr Asn Leu Ala His Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn
85 90 95

Ser Leu Gln Ser Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp
100 105 110

Gly Thr Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln
130 135 140

Leu Thr Ser Gly Gly Ala Ser
145 150

<210> 102
<211> 457
<212> DNA
<213> Mus musculus

<400> 102
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60

gttgtgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120

tcttgcacat ctagtcagac ccttgtacac agtaatggaa acacctattt acattggtac 180

ctgcagaagc caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240

ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300

agagtggagg ctgaggatct gggagtttat ttctgctctc acagtacaca tgttccattc 360

acgttcggct cggggacaaa gttggaaata aaacgggctg atgctgcacc aactgtatcc 420

atcttcccac catccagtga gcagttaaca tctggag 457

<210> 103
<211> 152
<212> PRT
<213> Mus musculus

<400> 103

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

Ser Ser Ser Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val
20 25 30

Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Thr Ser Ser Gln Thr Leu
35 40 45

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

Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65 70 75 80

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
85 90 95

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys
100 105 110

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

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

Ser Ser Glu Gln Leu Thr Ser Gly
145 150

<210> 104
<211> 423

<212> DNA
<213> Mus musculus

<400> 104
atgaggttct ctgctcagct tctggggctg cttgtgctct ggatccctgg atccactgcg 60

gaaattgtga tgacgcaggc tgcattctcc aatccagtca ctcttggaac atcagcttcc 120

atctcctgca ggtctagtaa gagtctccta catagtgatg gcatcactta tttgtattgg 180

tatctgcaga agccaggcca gtctcctcag ctcctgattt atcagatgtc caaccttgcc 240

tcaggagtcc cagacaggtt cagtagcagt gggtcaggaa ctgatttcac actgagaatc 300

agcagagtgg aggctgagga tgtgggtgtt tattactgtg ctcaaaatct agaactttac 360

acgttcggag gggggaccaa gctggaaata aaacgggctg atgctgcacc aactgtatcc 420

atc 423

<210> 105
<211> 141
<212> PRT
<213> Mus musculus

<400> 105

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

Gly Ser Thr Ala Glu Ile Val Met Thr Gln Ala Ala Phe Ser Asn Pro
20 25 30

Val Thr Leu Gly Thr Ser Ala Ser Ile Ser Cys Arg Ser Ser Lys Ser
35 40 45

Leu Leu His Ser Asp Gly Ile Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys
50 55 60

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Gln Met Ser Asn Leu Ala
65 70 75 80

Ser Gly Val Pro Asp Arg Phe Ser Ser Ser Gly Ser Gly Thr Asp Phe
85 90 95

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

Cys Ala Gln Asn Leu Glu Leu Tyr Thr Phe Gly Gly Gly Thr Lys Leu
115 120 125

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Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser Ile
    130                 135                 140
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<210> 106
<211> 423
<212> DNA
<213> Mus musculus

<400> 106

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gaaattgtga tgacgcaggc tgcattctcc aatccagtca ctcttggaac atcagcttcc    120

atctcctgca ggtctagtaa gagtctccta catagtgatg gcatcactta tttgtattgg    180

tatctgcaga agccaggcca gtctcctcag ctcctgattt atcagatgtc caaccttgcc    240

tcaggagtcc cagacaggtt cagtagcagt gggtcaggaa ctgatttcac actgagaatc    300

agcagagtgg aggctgagga tgtgggtgtt tattactgtg ctcaaaatct agaactttac    360

acgttcggag gggggaccaa gctggaaata aaacgggctg atgctgcacc aactgtatcc    420

atc                                                                  423
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<210> 107
<211> 141
<212> PRT
<213> Mus musculus

<400> 107

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

Gly Ser Thr Ala Glu Ile Val Met Thr Gln Ala Ala Phe Ser Asn Pro
            20                  25                  30

Val Thr Leu Gly Thr Ser Ala Ser Ile Ser Cys Arg Ser Ser Lys Ser
        35                  40                  45

Leu Leu His Ser Asp Gly Ile Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys
    50                  55                  60

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Gln Met Ser Asn Leu Ala
65                  70                  75                  80

Ser Gly Val Pro Asp Arg Phe Ser Ser Ser Gly Ser Gly Thr Asp Phe
                85                  90                  95
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Thr Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
100 105 110

Cys Ala Gln Asn Leu Glu Leu Tyr Thr Phe Gly Gly Gly Thr Lys Leu
115 120 125

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

<210> 108
<211> 404
<212> DNA
<213> Mus musculus

<400> 108
atgatgtcct ctgctcagtt ccttggtctc ctgttgctct gttttcaagg taccagatgt 60

gatatccaga tgacacagac tacatcctcc ctgtctgcct ctctggggga cagagtcacc 120

atcagttgca gggcaagtca ggacattgac aattatttaa actggtatca gcagaaacca 180

gatggaactg ttaaactcct gatctactac acatcaagat tacactcagg agtcccatca 240

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 300

gaagatgttg ccacttactt ttgccagcag tttaatacgc ttcctcggac gttcggtgga 360

ggcaccaaac tggaaatcaa acgggctgat gctgcaccaa ctgt 404

<210> 109
<211> 134
<212> PRT
<213> Mus musculus

<400> 109

Met Met Ser Ser Ala Gln Phe Leu Gly Leu Leu Leu Leu Cys Phe Gln
1 5 10 15

Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
20 25 30

Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
35 40 45

Ile Asp Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
50 55 60

Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser
85 90 95

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

Thr Leu Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Asp Ala Ala Pro Thr
130

<210> 110
<211> 414
<212> DNA
<213> Mus musculus

<400> 110
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gatatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggggg cagcgtcacc 120

atcagttgca gggcaagtca ggacattgac aattatttaa actggtatca gcaaaaacca 180

gatggaactg ttaaactcct gatctactac acatcaagat tacactcagg agtcccatca 240

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggaacaa 300

gaagatattg ccacttactt ttgccaacag tttaatacgc ttcctcggac gttcggtgga 360

ggcaccaagc tggaaatcaa acgggctgat gctgcaccaa ctgtatccat cttc 414

<210> 111
<211> 138
<212> PRT
<213> Mus musculus

<400> 111

Met Met Ser Ser Ala Gln Phe Leu Gly Leu Leu Leu Leu Cys Phe Gln
1 5 10 15

Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
20 25 30

Ala Ser Leu Gly Gly Ser Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
35 40 45

Ile Asp Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
50 55 60

Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser
85 90 95

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

Thr Leu Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Asp Ala Ala Pro Thr Val Ser Ile Phe
130 135

<210> 112
<211> 465
<212> DNA
<213> Mus musculus

<400> 112
atgatgtcct ctgctcagtt ccttggtctc ctgttgctct gttttcaagg taccagatgt 60

gatatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggggg cagcgtcacc 120

atcagttgca gggcaagtca ggacattgac aattatttaa actggtatca gcaaaaacca 180

gatggaactg ttaaactcct gatctactac acatcaagat tacactcagg agtcccatca 240

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggaacaa 300

gaagatattg ccacttactt ttgccaacag tttaatacgc ttcctcggac gttcggtgga 360

ggcaccaagc tggaaatcaa acgggctgat gctgcaccaa ctgtatccat cttcccacca 420

tccagtgagc agttaacatc tggaggtgcc tcagtcgtgt gcttc 465

<210> 113
<211> 155
<212> PRT
<213> Mus musculus

<400> 113

Met Met Ser Ser Ala Gln Phe Leu Gly Leu Leu Leu Leu Cys Phe Gln
1 5 10 15

Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
20 25 30

Ala Ser Leu Gly Gly Ser Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
35 40 45

Ile Asp Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
50 55 60

Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser
85 90 95

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

Thr Leu Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu Gln
130 135 140

Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe
145 150 155

<210> 114
<211> 93
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 114
accaagcttg ccgccaccat gaaagtgttg agtctgttgt acctgttgac agccattcct 60

ggtatcctgt ctcaggtcca actgcagcag cct 93

<210> 115
<211> 42
<212> DNA
<213> Artificial

<220>

<223> primer

<400> 115
cgatgggccc ttggtgctag ctgaggagac ggtgactgag gt 42

<210> 116
<211> 39
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 116
accaagcttg ccgccaccat gatgtcctct gctcagttc 39

<210> 117
<211> 33
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 117
agccacagtt cgtttgattt ccagcttggt gcc 33

<210> 118
<211> 33
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 118
ctggaaatca aacgaactgt ggctgcacca tct 33

<210> 119
<211> 30
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 119
aaagaattcc tagcactctc ccctgttgaa 30

<210> 120
<211> 1401
<212> DNA
<213> Chimaera sp.

<400> 120
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caactgcagc agcctggggc tgaactggtg aagcctggga cttcagtgaa aatgtcctgc 120
aaggcttctg gctacacctt caccagctac tggatgcact gggtgaagca gaggccggga 180
caaggccttg agtggattgg agatatttat cctggtagtg atagtactaa ctacaatgag 240
aagttcaaga gcaaggccac actgactgta gacacatcct ccagcacagc ctacatgcaa 300
ctcagcagcc tgacatctga ggactctgcg gtctattact gtgcaagagg agggtggttg 360
gatgctatgg actactgggg tcaaggaacc tcagtcaccg tctcctcagc tagcaccaag 420
ggcccatcgg tcttcccccc ggcaccctcc tccaagagca cctctggggg cacagcggcc 480
ctgggctgcc tggtcaagga ctacttcccc gaaccggtga cggtgtcgtg gaactcaggc 540
gccctgacca gcggcgtgca caccttcccg gctgtcctac agtcctcagg actctactcc 600
ctcagcagcg tggtgaccgt gccctccagc agcttgggca cccagaccta catctgcaac 660
gtgaatcaca agcccagcaa caccaaggtg gacaagaaag ttgagcccaa atcttgtgac 720
aaaactcaca catgcccacc gtgcccagca cctgaactcc tgggggggacc gtcagtcttc 780
ctcttccccc caaaacccaa ggacaccctc atgatctccc ggaccccctga ggtcacatgc 840
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gtggaggtgc ataatgccaa gacaaagccg cgggaggagc agtacaacag cacgtaccgt 960
gtggtcagcg tcctcaccgt cctgcaccag gactggctga atggcaagga gtacaagtgc 1020
aaggtctcca acaaagccct cccagccccc atcgagaaaa ccatctccaa agccaaaggg 1080
cagccccgag aaccacaggt gtacaccctg cccccatccc gggatgagct gaccaagaac 1140
caggtcagcc tgacctgcct ggtcaaaggc ttctatccca gcgacatcgc cgtggagtgg 1200
gagagcaatg ggcagccgga gaacaactac aagaccacgc ctcccgtgct ggactccgac 1260
ggctccttct tcctctacag caagctcacc gtggacaaga gcaggtggca gcaggggaac 1320
gtcttctcat gctccgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc 1380
tccctgtctc cgggtaaatg a 1401

<210> 121
<211> 466
<212> PRT
<213> Chimaera sp.

<400> 121

Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
1 5 10 15

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

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

Ser Tyr Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu
50 55 60

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

Lys Phe Lys Ser Lys Ala Thr Leu Thr Val Asp Thr Ser Ser Ser Thr
85 90 95

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

Tyr Cys Ala Arg Gly Gly Trp Leu Asp Ala Met Asp Tyr Trp Gly Gln
115 120 125

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

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
145 150 155 160

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
165 170 175

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
180 185 190

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
195 200 205

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
210 215 220

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
225 230 235 240

Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
245 250 255

Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
260 265 270

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
275 280 285

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
290 295 300

Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg
305 310 315 320

Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
325 330 335

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
340 345 350

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
355 360 365

Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu
370 375 380

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
385 390 395 400

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
405 410 415

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
420 425 430

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
435 440 445

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
450 455 460

Gly Lys
465

<210> 122
<211> 705
<212> DNA
<213> Chimaera sp.

<400> 122
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gatatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 120

atcagttgca gggcaagtca ggacattagc aattatttaa actggtatca gcagaaacca 180

gatggaactg ttaaactcct gatctactac acatcaagat tacactcagg agtcccatca 240

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 300

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtggac gttcggtgga 360

ggcaccaagc tggaaatcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 420

tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 480

cccagagagg ccaaagtaca gtggaaggtg gataacgccc tccaatcggg taactcccag 540

gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 600

ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc 660

ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gctag 705

<210> 123
<211> 234
<212> PRT
<213> Chimaera sp.

<400> 123

Met Met Ser Ser Ala Gln Phe Leu Gly Leu Leu Leu Leu Cys Phe Gln
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Gly Thr Arg Cys Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser
20 25 30

Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp
35 40 45

Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val
50 55 60

Lys Leu Leu Ile Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser
85 90 95

Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn
100 105 110

Thr Leu Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
130 135 140

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

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

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

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

<210> 124
<211> 1521
<212> DNA
<213> Macaca mulatta

<220>
<221> gene
<222> (1)..(1521)

<400> 124

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tggctgggct ccatggctct tacctacctc ctgtggcaag tgcgctgtcc tcccacctgg 180
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gagcccctgg aagcggaggt caggaagcag agggactcct gccagcttgt ccttgtggaa 300
agcatccccc aggacctgcc atttgcagcc ggcagcctct ccgcccagcc tctgggccag 360
gcctggctgc agctgctgga cactgcccag gagagcgtcc acgtggcttc atactactgg 420
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cgacgggtgc ccatggggcg gctcaccagg ggcgttttgc actccaaatt ctgggttgtg 660
gatggacggc acatatacat gggcagtgcc aacatggact ggcggtccct gacgcaggtg 720
aaggagcttg gcgctgtcat ctataactgc agccacctgg cccaagacct ggagaagacc 780
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gcggccaacg tctctgtgga cgtgaaagtc ttcatcgtgc cggtggggaa tcattccaac 1260
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acccagagcc ccggcgcgca gcccgcgggg gccacggtac aggagcagct gcggcagctc 1440
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gactgcgttt ggcagggctg a 1521

<210> 125
<211> 2142
<212> DNA
<213> Homo sapiens

<400> 125
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ccatgcaaat gcccagcacc taacctcttg ggtggaccat ccgtcttcat cttccctcca 180
aagatcaagg atgtactcat gatctccctg agccccatag tcacatgtgt ggtggtggat 240
gtgagcgagg atgacccaga tgtccagatc agctggtttg tgaacaacgt ggaagtacac 300
acagctcaga cacaaaccca tagagaggat tacaacagta ctctccgggt ggtcagtgcc 360
ctccccatcc agcaccagga ctggatgagt ggcaaggagt tcaaatgcaa ggtcaacaac 420
aaagacctcc cagcgcccat cgagagaacc atctcaaaac ccaaagggtc agtaagagct 480
ccacaggtat atgtcttgcc tccaccagaa gaagagatga ctaagaaaca ggtcactctg 540
acctgcatgg tcacagactt catgcctgaa gacatttacg tggagtggac caacaacggg 600
aaaacagagc taaactacaa gaacactgaa ccagtcctgg actctgatgg ttcttacttc 660
atgtacagca agctgagagt ggaaaagaag aactgggtgg aaagaaatag ctactcctgt 720
tcagtggtcc acgagggtct gcacaatcac cacacgacta agagcttctc ccggactccg 780
ggtaaacgtc ctcccacctg gggccaggtg cagcccaagg acgtgcccag gtcctgggag 840
catggctcca gcccagcttg ggagcccctg gaagcagagg ccaggcagca gagggactcc 900
tgccagcttg tccttgtgga aagcatcccc caggacctgc catctgcagc cggcagcccc 960
tctgcccagc ctctgggcca ggcctggctg cagctgctgg acactgccca ggagagcgtc 1020
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ctgcaggcgc tcagcaaccc cgcggccaac gtctctgtgg acgtgaaagt cttcatcgtg 1860

ccggtgggga accattccaa catcccattc agcagggtga accacagcaa gttcatggtc 1920

acggagaagg cagcctacat aggcacctcc aactggtcgg aggattactt cagcagcacg 1980

gcgggggtgg gcttggtggt cacccagagc cctggcgcgc agcccgcggg ggccacggtg 2040

caggagcagc tgcggcagct ctttgagcgg gactggagtt cgcgctacgc cgtcggcctg 2100

gacggacagg ctccgggcca ggactgcgtt tggcagggct ga 2142

<210> 126
<211> 713
<212> PRT
<213> Homo sapiens

<400> 126

Met Glu Phe Gln Thr Gln Val Phe Val Phe Val Leu Leu Trp Leu Ser
1 5 10 15

Gly Val Asp Gly Asp Tyr Lys Asp Asp Asp Asp Lys Gly Ser Pro Arg
20 25 30

Gly Pro Thr Ile Lys Pro Cys Pro Pro Cys Lys Cys Pro Ala Pro Asn
35 40 45

Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro Lys Ile Lys Asp
50 55 60

Val Leu Met Ile Ser Leu Ser Pro Ile Val Thr Cys Val Val Val Asp
65 70 75 80

Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp Phe Val Asn Asn
85 90 95

Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg Glu Asp Tyr Asn
100 105 110

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

Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn Lys Asp Leu Pro
130 135 140

Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly Ser Val Arg Ala
145 150 155 160

Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu Glu Met Thr Lys Lys
165 170 175

Gln Val Thr Leu Thr Cys Met Val Thr Asp Phe Met Pro Glu Asp Ile
180 185 190

Tyr Val Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu Asn Tyr Lys Asn
195 200 205

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

Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn Ser Tyr Ser Cys
225 230 235 240

Ser Val Val His Glu Gly Leu His Asn His His Thr Thr Lys Ser Phe
245 250 255

Ser Arg Thr Pro Gly Lys Arg Pro Pro Thr Trp Gly Gln Val Gln Pro
260 265 270

Lys Asp Val Pro Arg Ser Trp Glu His Gly Ser Ser Pro Ala Trp Glu
275 280 285

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

Leu Val Glu Ser Ile Pro Gln Asp Leu Pro Ser Ala Ala Gly Ser Pro
305 310 315 320

Ser Ala Gln Pro Leu Gly Gln Ala Trp Leu Gln Leu Leu Asp Thr Ala
325 330 335

Gln Glu Ser Val His Val Ala Ser Tyr Tyr Trp Ser Leu Thr Gly Pro
340 345 350

Asp Ile Gly Val Asn Asp Ser Ser Ser Gln Leu Gly Glu Ala Leu Leu
355 360 365

Gln Lys Leu Gln Gln Leu Leu Gly Arg Asn Ile Ser Leu Ala Val Ala

370 375 380

Thr Ser Ser Pro Thr Leu Ala Arg Thr Ser Thr Asp Leu Gln Val Leu
385 390 395 400

Ala Ala Arg Gly Ala His Val Arg Gln Val Pro Met Gly Arg Leu Thr
405 410 415

Arg Gly Val Leu His Ser Lys Phe Trp Val Val Asp Gly Arg His Ile
420 425 430

Tyr Met Gly Ser Ala Asn Met Asp Trp Arg Ser Leu Thr Gln Val Lys
435 440 445

Glu Leu Gly Ala Val Ile Tyr Asn Cys Ser His Leu Ala Gln Asp Leu
450 455 460

Glu Lys Thr Phe Gln Thr Tyr Trp Val Leu Gly Val Pro Lys Ala Val
465 470 475 480

Leu Pro Lys Thr Trp Pro Gln Asn Phe Ser Ser His Phe Asn Arg Phe
485 490 495

Gln Pro Phe His Gly Leu Phe Asp Gly Val Pro Thr Thr Ala Tyr Phe
500 505 510

Ser Ala Ser Pro Pro Ala Leu Cys Pro Gln Gly Arg Thr Arg Asp Leu
515 520 525

Glu Ala Leu Leu Ala Val Met Gly Ser Ala Gln Glu Phe Ile Tyr Ala
530 535 540

Ser Val Met Glu Tyr Phe Pro Thr Thr Arg Phe Ser His Pro Pro Arg
545 550 555 560

Tyr Trp Pro Val Leu Asp Asn Ala Leu Arg Ala Ala Ala Phe Gly Lys
565 570 575

Gly Val Arg Val Arg Leu Leu Val Gly Cys Gly Leu Asn Thr Asp Pro
580 585 590

Thr Met Phe Pro Tyr Leu Arg Ser Leu Gln Ala Leu Ser Asn Pro Ala
595 600 605

Ala Asn Val Ser Val Asp Val Lys Val Phe Ile Val Pro Val Gly Asn
610 615 620

His Ser Asn Ile Pro Phe Ser Arg Val Asn His Ser Lys Phe Met Val
625 630 635 640

Thr Glu Lys Ala Ala Tyr Ile Gly Thr Ser Asn Trp Ser Glu Asp Tyr
645 650 655

Phe Ser Ser Thr Ala Gly Val Gly Leu Val Val Thr Gln Ser Pro Gly
660 665 670

Ala Gln Pro Ala Gly Ala Thr Val Gln Glu Gln Leu Arg Gln Leu Phe
675 680 685

Glu Arg Asp Trp Ser Ser Arg Tyr Ala Val Gly Leu Asp Gly Gln Ala
690 695 700

Pro Gly Gln Asp Cys Val Trp Gln Gly
705 710

<210> 127
<211> 490
<212> PRT
<213> Homo sapiens

<400> 127

Met Lys Pro Lys Leu Met Tyr Gln Glu Leu Lys Val Pro Ala Glu Glu
1 5 10 15

Pro Ala Asn Glu Leu Pro Met Asn Glu Ile Glu Ala Trp Lys Ala Ala
20 25 30

Glu Lys Lys Ala Arg Trp Val Leu Leu Val Leu Ile Leu Ala Val Val
35 40 45

Gly Phe Gly Ala Leu Met Thr Gln Leu Phe Leu Trp Glu Tyr Gly Asp
50 55 60

Leu His Leu Phe Gly Pro Asn Gln Arg Pro Ala Pro Cys Tyr Asp Pro
65 70 75 80

Cys Glu Ala Val Leu Val Glu Ser Ile Pro Glu Gly Leu Asp Phe Pro
85 90 95

Asn Ala Ser Thr Gly Asn Pro Ser Thr Ser Gln Ala Trp Leu Gly Leu
100 105 110

Leu Ala Gly Ala His Ser Ser Leu Asp Ile Ala Ser Phe Tyr Trp Thr
115 120 125

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

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

Val Arg Ile Ala Val Ser Lys Pro Ser Gly Pro Gln Pro Gln Ala Asp
165 170 175

Leu Gln Ala Leu Leu Gln Ser Gly Ala Gln Val Arg Met Val Asp Met
180 185 190

Gln Lys Leu Thr His Gly Val Leu His Thr Lys Phe Trp Val Val Asp
195 200 205

Gln Thr His Phe Tyr Leu Gly Ser Ala Asn Met Asp Trp Arg Ser Leu
210 215 220

Thr Gln Val Lys Glu Leu Gly Val Val Met Tyr Asn Cys Ser Cys Leu
225 230 235 240

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

Ala Gly Ser Ser Ile Pro Ser Thr Trp Pro Arg Phe Tyr Asp Thr Arg
260 265 270

Tyr Asn Gln Glu Thr Pro Met Glu Ile Cys Leu Asn Gly Thr Pro Ala
275 280 285

Leu Ala Tyr Leu Ala Ser Ala Pro Pro Pro Leu Cys Pro Ser Gly Arg
290 295 300

Thr Pro Asp Leu Lys Ala Leu Leu Asn Val Val Asp Asn Ala Arg Ser
305 310 315 320

Phe Ile Tyr Val Ala Val Met Asn Tyr Leu Pro Thr Leu Glu Phe Ser
325 330 335

His Pro His Arg Phe Trp Pro Ala Ile Asp Asp Gly Leu Arg Arg Ala
340 345 350

Thr Tyr Glu Arg Gly Val Lys Val Arg Leu Leu Ile Ser Cys Trp Gly
355 360 365

His Ser Glu Pro Ser Met Arg Ala Phe Leu Leu Ser Leu Ala Ala Leu
370 375 380

Arg Asp Asn His Thr His Ser Asp Ile Gln Val Lys Leu Phe Val Val
385 390 395 400

Pro Ala Asp Glu Ala Gln Ala Arg Ile Pro Tyr Ala Arg Val Asn His
405 410 415

Asn Lys Tyr Met Val Thr Glu Arg Ala Thr Tyr Ile Gly Thr Ser Asn
420 425 430

Trp Ser Gly Asn Tyr Phe Thr Glu Thr Ala Gly Thr Ser Leu Leu Val
435 440 445

Thr Gln Asn Gly Arg Gly Gly Leu Arg Ser Gln Leu Glu Ala Ile Phe
450 455 460

Leu Arg Asp Trp Asp Ser Pro Tyr Ser His Asp Leu Asp Thr Ser Ala
465 470 475 480

Asp Ser Val Gly Asn Ala Cys Arg Leu Leu
485 490

<210> 128
<211> 445
<212> PRT
<213> Homo sapiens

<400> 128

Met Gly Glu Asp Glu Asp Gly Leu Ser Glu Lys Asn Cys Gln Asn Lys
1 5 10 15

Cys Arg Ile Ala Leu Val Glu Asn Ile Pro Glu Gly Leu Asn Tyr Ser
20 25 30

Glu Asn Ala Pro Phe His Leu Ser Leu Phe Gln Gly Trp Met Asn Leu
35 40 45

Leu Asn Met Ala Lys Lys Ser Val Asp Ile Val Ser Ser His Trp Asp
50 55 60

Leu Asn His Thr His Pro Ser Ala Cys Gln Gly Gln Arg Leu Phe Glu
65 70 75 80

Lys Leu Leu Gln Leu Thr Ser Gln Asn Ile Glu Ile Lys Leu Val Ser
85 90 95

Asp Val Thr Ala Asp Ser Lys Val Leu Glu Ala Leu Lys Leu Lys Gly
100 105 110

Ala Glu Val Thr Tyr Met Asn Met Thr Ala Tyr Asn Lys Gly Arg Leu
115 120 125

Gln Ser Ser Phe Trp Ile Val Asp Lys Gln His Val Tyr Ile Gly Ser
130 135 140

Ala Gly Leu Asp Trp Gln Ser Leu Gly Gln Met Lys Glu Leu Gly Val
145 150 155 160

Ile Phe Tyr Asn Cys Ser Cys Leu Val Leu Asp Leu Gln Arg Ile Phe
165 170 175

Ala Leu Tyr Ser Ser Leu Lys Phe Lys Ser Arg Val Pro Gln Thr Trp
180 185 190

Ser Lys Arg Leu Tyr Gly Val Tyr Asp Asn Glu Lys Lys Leu Gln Leu
195 200 205

Gln Leu Asn Glu Thr Lys Ser Gln Ala Phe Val Ser Asn Ser Pro Lys
210 215 220

Leu Phe Cys Pro Lys Asn Arg Ser Phe Asp Ile Asp Ala Ile Tyr Ser
225 230 235 240

Val Ile Asp Asp Ala Lys Gln Tyr Val Tyr Ile Ala Val Met Asp Tyr
245 250 255

Leu Pro Ile Ser Ser Thr Ser Thr Lys Arg Thr Tyr Trp Pro Asp Leu

260 265 270

Asp Ala Lys Ile Arg Glu Ala Leu Val Leu Arg Ser Val Arg Val Arg
275 280 285

Leu Leu Leu Ser Phe Trp Lys Glu Thr Asp Pro Leu Thr Phe Asn Phe
290 295 300

Ile Ser Ser Leu Lys Ala Ile Cys Thr Glu Ile Ala Asn Cys Ser Leu
305 310 315 320

Lys Val Lys Phe Phe Asp Leu Glu Arg Glu Asn Ala Cys Ala Thr Lys
325 330 335

Glu Gln Lys Asn His Thr Phe Pro Arg Leu Asn Arg Asn Lys Tyr Met
340 345 350

Val Thr Asp Gly Ala Ala Tyr Ile Gly Asn Phe Asp Trp Val Gly Asn
355 360 365

Asp Phe Thr Gln Asn Ala Gly Thr Gly Leu Val Ile Asn Gln Ala Asp
370 375 380

Val Arg Asn Asn Arg Ser Ile Ile Lys Gln Leu Lys Asp Val Phe Glu
385 390 395 400

Arg Asp Trp Tyr Ser Pro Tyr Ala Lys Thr Leu Gln Pro Thr Lys Gln
405 410 415

Pro Asn Cys Ser Ser Leu Phe Lys Leu Lys Pro Leu Ser Asn Lys Thr
420 425 430

Ala Thr Asp Asp Thr Gly Gly Lys Asp Pro Arg Asn Val
435 440 445

<210> 129
<211> 506
<212> PRT
<213> Macaca fascicularis

<400> 129

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

Ser Met Leu Pro Arg Arg Leu Trp Asp Arg Glu Ala Gly Thr Leu Gln
20 25 30

Val Leu Gly Val Leu Ala Met Leu Trp Leu Gly Ser Met Ala Leu Thr
35 40 45

Tyr Leu Leu Trp Gln Val Arg Arg Pro Pro Thr Trp Gly Gln Val Gln
50 55 60

Pro Lys Asp Val Pro Arg Ser Trp Gly His Gly Ser Ser Pro Ala Leu
65 70 75 80

Glu Pro Leu Glu Ala Glu Val Arg Lys Gln Arg Asp Ser Cys Gln Leu
85 90 95

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

Leu Ser Ala Gln Pro Leu Gly Gln Ala Trp Leu Gln Leu Leu Asp Thr
115 120 125

Ala Gln Glu Ser Val His Val Ala Ser Tyr Tyr Trp Ser Leu Thr Gly
130 135 140

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

Leu Gln Lys Leu Gln Gln Leu Leu Gly Arg Asn Ile Ser Leu Ala Val
165 170 175

Ala Thr Ser Ser Pro Thr Leu Ala Arg Lys Ser Thr Asp Leu Gln Val
180 185 190

Leu Ala Ala Arg Gly Ala Gln Val Arg Arg Val Pro Met Gly Arg Leu
195 200 205

Thr Arg Gly Val Leu His Ser Lys Phe Trp Val Val Asp Gly Arg His
210 215 220

Ile Tyr Met Gly Ser Ala Asn Met Asp Trp Arg Ser Leu Thr Gln Val
225 230 235 240

Lys Glu Leu Gly Ala Val Ile Tyr Asn Cys Ser His Leu Ala Gln Asp
245 250 255

Leu Glu Lys Thr Phe Gln Thr Tyr Trp Val Leu Gly Val Pro Lys Ala
260 265 270

Val Leu Pro Lys Thr Trp Pro Gln Asn Phe Ser Ser His Ile Asn Arg
275 280 285

Phe Gln Pro Phe Gln Gly Leu Phe Asp Gly Val Pro Thr Thr Ala Tyr
290 295 300

Phe Ser Ala Ser Pro Pro Ala Leu Cys Pro Gln Gly Arg Thr Pro Asp
305 310 315 320

Leu Glu Ala Leu Leu Ala Val Met Gly Ser Ala Gln Glu Phe Ile Tyr
325 330 335

Ala Ser Val Met Glu Tyr Phe Pro Thr Thr Arg Phe Ser His Pro Arg
340 345 350

Arg Tyr Trp Pro Val Leu Asp Asn Ala Leu Arg Ala Ala Ala Phe Ser
355 360 365

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

Pro Thr Met Phe Pro Tyr Leu Arg Ser Leu Gln Ala Leu Ser Asn Pro
385 390 395 400

Ala Ala Asn Val Ser Val Asp Val Lys Val Phe Ile Val Pro Val Gly
405 410 415

Asn His Ser Asn Ile Pro Phe Ser Arg Val Asn His Ser Lys Phe Met
420 425 430

Val Thr Glu Lys Ala Ala Tyr Ile Gly Thr Ser Asn Trp Ser Glu Asp
435 440 445

Tyr Phe Ser Ser Thr Thr Gly Val Gly Leu Val Val Thr Gln Ser Pro
450 455 460

Gly Ala Gln Pro Ala Gly Ala Thr Val Gln Glu Gln Leu Arg Gln Leu
465 470 475 480

Phe Glu Arg Asp Trp Ser Ser Arg Tyr Ala Val Gly Leu Asp Gly Gln
485 490 495

Ala Pro Gly Gln Asp Cys Val Trp Gln Gly
500 505

<210> 130
<211> 506
<212> PRT
<213> Macaca mulatta

<400> 130

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

Ser Met Leu Pro Arg Arg Leu Trp Asp Arg Glu Ala Gly Thr Leu Gln
20 25 30

Val Leu Gly Val Leu Ala Met Leu Trp Leu Gly Ser Met Ala Leu Thr
35 40 45

Tyr Leu Leu Trp Gln Val Arg Cys Pro Pro Thr Trp Gly Gln Val Gln
50 55 60

Pro Arg Asp Val Pro Arg Ser Trp Gly His Gly Ser Ser Leu Ala Leu
65 70 75 80

Glu Pro Leu Glu Ala Glu Val Arg Lys Gln Arg Asp Ser Cys Gln Leu
85 90 95

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

Leu Ser Ala Gln Pro Leu Gly Gln Ala Trp Leu Gln Leu Leu Asp Thr
115 120 125

Ala Gln Glu Ser Val His Val Ala Ser Tyr Tyr Trp Ser Leu Thr Gly
130 135 140

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

Leu Gln Lys Leu Gln Gln Leu Leu Gly Arg Asn Ile Ser Leu Ala Val
165 170 175

Ala Thr Ser Ser Pro Thr Leu Ala Arg Lys Ser Thr Asp Leu Gln Val
180 185 190

Leu Ala Ala Arg Gly Ala Gln Val Arg Arg Val Pro Met Gly Arg Leu
195 200 205

Thr Arg Gly Val Leu His Ser Lys Phe Trp Val Val Asp Gly Arg His
210 215 220

Ile Tyr Met Gly Ser Ala Asn Met Asp Trp Arg Ser Leu Thr Gln Val
225 230 235 240

Lys Glu Leu Gly Ala Val Ile Tyr Asn Cys Ser His Leu Ala Gln Asp
245 250 255

Leu Glu Lys Thr Phe Gln Thr Tyr Trp Val Leu Gly Val Pro Lys Ala
260 265 270

Val Leu Pro Lys Thr Trp Pro Gln Asn Phe Ser Ser His Ile Asn Arg
275 280 285

Phe Gln Pro Phe Gln Gly Leu Phe Asp Gly Val Pro Thr Thr Ala Tyr
290 295 300

Phe Ser Ala Ser Pro Pro Ala Leu Cys Pro Gln Gly Arg Thr Pro Asp
305 310 315 320

Leu Glu Ala Leu Leu Ala Val Met Gly Ser Ala Gln Glu Phe Ile Tyr
325 330 335

Ala Ser Val Met Glu Tyr Phe Pro Thr Thr Arg Phe Ser His Pro Arg
340 345 350

Arg Tyr Trp Pro Val Leu Asp Asn Ala Leu Arg Ala Ala Ala Phe Ser
355 360 365

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

Pro Thr Met Phe Pro Tyr Leu Arg Ser Leu Gln Ala Leu Ser Asn Pro
385 390 395 400

Ala Ala Asn Val Ser Val Asp Val Lys Val Phe Ile Val Pro Val Gly

405 410 415

Asn His Ser Asn Ile Pro Phe Ser Arg Val Asn His Ser Lys Phe Met
420 425 430

Val Thr Glu Lys Ala Ala Tyr Ile Gly Thr Ser Asn Trp Ser Glu Asp
435 440 445

Tyr Phe Ser Ser Thr Thr Gly Val Gly Leu Val Val Thr Gln Ser Pro
450 455 460

Gly Ala Gln Pro Ala Gly Ala Thr Val Gln Glu Gln Leu Arg Gln Leu
465 470 475 480

Phe Glu Arg Asp Trp Ser Ser Arg Tyr Ala Val Gly Leu Asp Gly Gln
485 490 495

Ala Pro Gly Gln Asp Cys Val Trp Gln Gly
500 505

<210> 131
<211> 1512
<212> DNA
<213> Mus musculus

<400> 131
atggacaaga agaaagagca cccagagatg cggataccac tccagacagc agtggaggtc 60

tctgattggc cctgctccac atctcatgat ccacatagcg gacttggcat ggtactgggg 120

atgctagctg tactgggact cagctctgtg actctcatct tgttcctgtg gcaaggggcc 180

acttctttca ccagtcatcg gatgttccct gaggaagtgc cctcctggtc ctgggagacc 240

ctgaaaggag acgctgagca gcagaataac tcctgtcagc tcatccttgt ggaaagcatc 300

cccgaggact tgccatttgc agctggcagc cccactgccc agcccctggc ccaggcttgg 360

ctgcagcttc ttgacactgc tcgggagagc gtccacattg cctcgtacta ctggtccctc 420

actggactgg acattggagt caatgactcg tcttctcggc agggagaggc ccttctacag 480

aagttccaac agcttcttct caggaacatc tctgtggtgg tggccaccca cagcccaaca 540

ttggccaaga catccactga cctccaggtc ttggctgccc atggtgccca gatacgacaa 600

gtgcccatga aacagcttac tgggggtgtt ctacactcca aattctgggt tgtggatggg 660

cgacacgtct acgtgggcag cgccaacatg gactggcggt ccctgactca ggtgaaggaa 720

cttggtgcaa tcatctacaa ctgcagcaac ctggctcaag accttgagaa aacattccag 780

acctactggg tgctagggac tccccaagct gttctcccta aaacctggcc tcggaacttc 840

tcatcccaca tcaaccgctt ccatcccttg cggggtccct ttgatggggt tcccaccacg 900

gcctatttct cggcctcccc tccctccctc tgcccgcatg gccggacccg ggatctggac 960

gcagtgttgg gagtgatgga gggtgctcgc cagttcatct atgtctcggt gatggagtat 1020

ttccctacca cgcgcttcac ccaccatgcc aggtactggc ccgtgctgga caatgcgcta 1080

cgggcagcgg ccctcaataa gggtgtgcat gtgcgcttac tggtcagctg ctggttcaac 1140

acagacccca ccatgttcgc ttatctgagg tccctgcagg ctttcagtaa cccctcggct 1200

ggcatctcag tggatgtgaa agtcttcatc gtgcctgtgg gaaatcattc caacatcccg 1260

ttcagccgcg tgaaccacag caagttcatg gtcacagaca agacagccta tgtaggcacc 1320

tctaactggt cagaagacta cttcagccac accgctggtg tgggcctgat tgtcagccag 1380

aagaccccca gagcccagcc aggcgcaacc accgtgcagg agcagctgag gcaactcttt 1440

gaacgagact ggagttccca ctatgctatg gacctagaca gacaagtccc gagccaggac 1500

tgtgtctggt ag 1512

<210> 132
<211> 503
<212> PRT
<213> Mus musculus

<400> 132

Met Asp Lys Lys Lys Glu His Pro Glu Met Arg Ile Pro Leu Gln Thr
1 5 10 15

Ala Val Glu Val Ser Asp Trp Pro Cys Ser Thr Ser His Asp Pro His
20 25 30

Ser Gly Leu Gly Met Val Leu Gly Met Leu Ala Val Leu Gly Leu Ser
35 40 45

Ser Val Thr Leu Ile Leu Phe Leu Trp Gln Gly Ala Thr Ser Phe Thr
50 55 60

Ser His Arg Met Phe Pro Glu Glu Val Pro Ser Trp Ser Trp Glu Thr
65 70 75 80

Leu Lys Gly Asp Ala Glu Gln Gln Asn Asn Ser Cys Gln Leu Ile Leu
85 90 95

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

Ala Gln Pro Leu Ala Gln Ala Trp Leu Gln Leu Leu Asp Thr Ala Arg
115 120 125

Glu Ser Val His Ile Ala Ser Tyr Tyr Trp Ser Leu Thr Gly Leu Asp
130 135 140

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

Lys Phe Gln Gln Leu Leu Leu Arg Asn Ile Ser Val Val Val Ala Thr
165 170 175

His Ser Pro Thr Leu Ala Lys Thr Ser Thr Asp Leu Gln Val Leu Ala
180 185 190

Ala His Gly Ala Gln Ile Arg Gln Val Pro Met Lys Gln Leu Thr Gly
195 200 205

Gly Val Leu His Ser Lys Phe Trp Val Val Asp Gly Arg His Val Tyr
210 215 220

Val Gly Ser Ala Asn Met Asp Trp Arg Ser Leu Thr Gln Val Lys Glu
225 230 235 240

Leu Gly Ala Ile Ile Tyr Asn Cys Ser Asn Leu Ala Gln Asp Leu Glu
245 250 255

Lys Thr Phe Gln Thr Tyr Trp Val Leu Gly Thr Pro Gln Ala Val Leu
260 265 270

Pro Lys Thr Trp Pro Arg Asn Phe Ser Ser His Ile Asn Arg Phe His
275 280 285

Pro Leu Arg Gly Pro Phe Asp Gly Val Pro Thr Thr Ala Tyr Phe Ser
290 295 300

Ala Ser Pro Pro Ser Leu Cys Pro His Gly Arg Thr Arg Asp Leu Asp
305 310 315 320

Ala Val Leu Gly Val Met Glu Gly Ala Arg Gln Phe Ile Tyr Val Ser

325 330 335

Val Met Glu Tyr Phe Pro Thr Thr Arg Phe Thr His His Ala Arg Tyr
340 345 350

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

Val His Val Arg Leu Leu Val Ser Cys Trp Phe Asn Thr Asp Pro Thr
370 375 380

Met Phe Ala Tyr Leu Arg Ser Leu Gln Ala Phe Ser Asn Pro Ser Ala
385 390 395 400

Gly Ile Ser Val Asp Val Lys Val Phe Ile Val Pro Val Gly Asn His
405 410 415

Ser Asn Ile Pro Phe Ser Arg Val Asn His Ser Lys Phe Met Val Thr
420 425 430

Asp Lys Thr Ala Tyr Val Gly Thr Ser Asn Trp Ser Glu Asp Tyr Phe
435 440 445

Ser His Thr Ala Gly Val Gly Leu Ile Val Ser Gln Lys Thr Pro Arg
450 455 460

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

Glu Arg Asp Trp Ser Ser His Tyr Ala Met Asp Leu Asp Arg Gln Val
485 490 495

Pro Ser Gln Asp Cys Val Trp
500