

A-2063-WO-PCT_SeqList_ST25-092817
SEQUENCE LISTING

<110> AMGEN INC.
HUH, Joon
STEVENSON, Riki
BONDARENKO, Pavel
NICHOLS, Andrew
REN, Da
AGRAWAL, Neeraj Jagdish
SMITH, Richard

<120> LOW-VISCOSITY ANTIGEN BINDING PROTEINS AND METHODS OF MAKING THEM

<130> A-2063-US-PSP3

<160> 379

<170> PatentIn version 3.5

<210> 1
<211> 705
<212> DNA
<213> Homo sapiens

<400> 1
atggaaaccc cggcgcagct gctgtttctg ctgctgctgt ggctgccgga taccaccggc 60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga cagagccacc 120
ctctcctgca gggccagtca gagtgttagt agcagctact ttgcctggta ccagcagaaa 180
cctggccagg ctcccaggct cctcatttat ggtgcatcca gtagggccac tggcatccca 240
gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 300
cctgaagatt ttgcagtgtg ttactgtcag cagtatgata ggtcacctcg gacgttcggc 360
caagggacca aggtggaaat caaacgtacg gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcacctcg 600
acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 2
<211> 235
<212> PRT
<213> Homo sapiens

<400> 2

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

A-2063-WO-PCT_SeqList_ST25-092817

Val Ser Ser Ser Tyr Phe Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro
65 70 75 80

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

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

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

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 3
<211> 1389
<212> DNA
<213> Homo sapiens

<400> 3
atggattgga cctggcgtat tctgtttctg gtggcggcgg cgaccggcgc gcatagccag 60
gtgcagctgg tgcagtctgg ggctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120
tgtaagtctt ctggatacac cttcaccggc tactatatgc actgggtgcg acaggcccct 180
ggacaagggc ttgagtggat gggatggatc aaccctaaca gtggtggcac aaactatgca 240
cagaagtta agggcagggt caccatgacc agggacacgt ccatcagcac agcctacatg 300
gagctgagca ggctgagatc tgacgacacg gccgtgtatt actgtgcgag agataagtgg 360
ctggacggct ttgactactg gggccaggga accctggtca ccgtctcttc agctagcacc 420

A-2063-WO-PCT_SeqList_ST25-092817

```

aagggcccat cggtcttccc cctggcgccc tgctccagga gcacctccga gagcacagcg      480
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca      540
ggcgctctga ccagcggcgt gcacaccttc ccagctgtcc tacagtcctc aggactctac      600
tccctcagca gcgtgggtgac cgtgccctcc agcaacttcg gcacccagac ctacacctgc      660
aacgtagatc acaagcccag caacaccaag gtggacaaga cagttgagcg caaatgttgt      720
gtcgagtgcc caccgtgccc agcaccacct gtggcaggac cgtcagtctt cctcttcccc      780
ccaaaacca aggacaccct catgatctcc cggacccttg aggtcacgtg cgtggtggtg      840
gacgtgagcc acgaagaccc cgaggtccag ttcaactggt acgtggacgg cgtggagggtg      900
cataatgcca agacaaagcc acgggaggag cagttcaaca gcacgttccg tgtggtcagc      960
gtcctcaccg ttgtgcacca ggactggctg aacggcaagg agtacaagtg caaggtctcc     1020
aacaaaggcc tcccagcccc catcgagaaa accatctcca aaaccaaagg gcagccccga     1080
gaaccacagg tgtacaccct gccccatcc cgggaggaga tgaccaagaa ccaggtcagc     1140
ctgacctgcc tgggtcaaagg cttctacccc agcgacatcg ccgtggagtg ggagagcaat     1200
gggcagccgg agaacaacta caagaccaca cctcccatgc tggactccga cggctccttc     1260
ttcctctaca gcaagctcac cgtggacaag agcaggtggc agcaggggaa cgtcttctca     1320
tgctccgtga tgcattgaggc tctgcacaac cactacacgc agaagagcct ctccctgtct     1380
ccgggtaaa                                     1389

```

<210> 4
 <211> 463
 <212> PRT
 <213> Homo sapiens
 <400> 4

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

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

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

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

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

Gln Lys Phe Lys Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser
 85 90 95

Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val
 Page 3

100

105

110

Tyr Tyr Cys Ala Arg Asp Lys Trp Leu Asp Gly Phe Asp Tyr Trp Gly
 115 120 125
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
 130 135 140
 Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
 145 150 155 160
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 165 170 175
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 180 185 190
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 195 200 205
 Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His
 210 215 220
 Lys Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys
 225 230 235 240
 Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
 245 250 255
 Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
 260 265 270
 Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
 275 280 285
 Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
 290 295 300
 Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
 305 310 315 320
 Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
 325 330 335
 Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile
 340 345 350
 Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
 355 360 365
 Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu

370

375

380

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

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
 405 410 415

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

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 435 440 445

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

<210> 5
 <211> 726
 <212> DNA
 <213> Homo sapiens

<400> 5
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
 cgctgtgata ttgtgatgac ccagactcca ctctccctgc ccgtcacccc tggagagccg 120
 gcctccatct cctgcaggtc tagtcagagc ctcttgaata gtgttgatgg aagcaccaat 180
 ttggactggg atctgcagaa gccagggcag tctccacagc tcctgatcta tacgctttcc 240
 tatcgggcct ctggagtccc agacagggtc agtggcagtg ggtcaggcac tgacttcaca 300
 ctgaaaatca gcagggtgga ggctgaggat gttggagttt attactgcat gcaacgtata 360
 gagtttccgc tcactttcgg cggagggacc aaggtggaga tcaaacgtac ggtggctgca 420
 ccatctgtct tcatcttccc gccatctgat gagcagttga aatctggaac tgcctctgtt 480
 gtgtgcctgc tgaataactt ctatcccaga gaggccaaag tacagtggaa ggtggataac 540
 gccctccaat cgggtaactc ccaggagagt gtcacagagc aggacagcaa ggacagcacc 600
 tacagcctca gcagcaccct gacgctgagc aaagcagact acgagaaaca caaagtctac 660
 gcctgcgaag tcacccatca gggcctgagc tcgcccgtca caaagagctt caacagggga 720
 gagtgt 726

<210> 6
 <211> 242
 <212> PRT
 <213> Homo sapiens

<400> 6

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

Leu Arg Gly Ala Arg Cys Asp Ile Val Met Thr Gln Thr Pro Leu Ser
 Page 5

20

25

30

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

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

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

Tyr Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
 85 90 95

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

Val Tyr Tyr Cys Met Gln Arg Ile Glu Phe Pro Leu Thr Phe Gly Gly
 115 120 125

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

Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val
 145 150 155 160

Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp
 165 170 175

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

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

Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val
 210 215 220

Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly
 225 230 235 240

Glu Cys

<210> 7
 <211> 1395
 <212> DNA
 <213> Homo sapiens

<400> 7
 atggagttgg ggctgtgctg ggttttcctt gttgctattt tagaaggtgt ccagtgtgag 60

gtgcagctgg tggagtctgg gggaggcttg gtacagcctg gggggtcctt gagactctcc 120
 Page 6

A-2063-WO-PCT_SeqList_ST25-092817

tgtgcagcct ctggattcac cttcagtagc tatagcatga actgggtccg ccaggctcca	180
gggaaggggc tggagtgggt ttcatacatt agtagtagtg gtagttccat atactacgca	240
gactctgtga agggccgatt caccatctcc agagacaatg ccaagaactc actgtatctg	300
caaatgaaca gcctgagaga cgaggacacg gctgtgtatt actgtgagag agagaggtac	360
tacggtgaca cgccctttga ctactggggc cagggaaacc tggtcaccgt ctctagtgcc	420
tccaccaagg gcccatcggg cttccccctg gcgccctgct ccaggagcac ctccgagagc	480
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg	540
aactcaggcg ctctgaccag cggcgtgcac accttccag ctgtcctaca gtcctcagga	600
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac	660
acctgcaacg tagatcaciaa gccagcaac accaaggtgg acaagacagt tgagcgcaaa	720
tggtgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc	780
ttccccccaa aaccaagga caccctcatg atctcccga cccctgaggt cacgtgctgtg	840
gtggtggacg tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg	900
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg	960
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgaag	1020
gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaagggcag	1080
ccccgagaac cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag	1140
gtcagcctga cctgcctggg caaaggcttc taccacagcg acatcgccgt ggagtgggag	1200
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc	1260
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc	1320
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc	1380
ctgtctccgg gtaaa	1395

<210> 8
 <211> 465
 <212> PRT
 <213> Homo sapiens

<400> 8

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

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

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

Ser Ser Tyr Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60

A-2063-WO-PCT_SeqList_ST25-092817

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

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

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

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

Lys
465

<210> 9
<211> 699
<212> DNA
<213> Homo sapiens

<400> 9
atgtcgccat cacaactcat tgggtttctg ctgctctggg ttccagcctc caggggtgaa 60
attgtgctga ctcagtctcc agactttcag tctgtgactc caaaggagaa agtcaccatc 120
acctgccggg ccagtcagag cattggtagt agcttacact ggtaccagca gaaaccagat 180
cagtctccaa agctcctcat caagtatgct tcccagtcct tctcaggggt cccctcgagg 240
ttcagtggca gtggatctgg gacagatttc accctcacca tcaatagcct ggaagctgaa 300
gatgctgcag cgtattactg tcatcagagt agtagtttac ctctcacttt cggcggaggg 360
accaaggtgg agatcaaacg aactgtggct gcaccatctg tcttcacttt cccgccatct 420
gatgagcagt tgaaatctgg aactgcctct gttgtgtgcc tgctgaataa cttctatccc 480
agagaggcca aagtacagtg gaaggtggat aacgccctcc aatcgggtaa ctcccaggag 540
agtgtcacag agcaggacag caaggacagc acctacagcc tcagcagcac cctgacgctg 600
agcaaagcag actacgagaa acacaaagtc tacgcctgcg aagtcaccca tcagggcctg 660
agctcgcccc tcacaaagag cttcaacagg ggagagtgt 699

<210> 10
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 10

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

Ser Arg Gly Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val
 20 25 30

Thr Pro Lys Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
 35 40 45

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

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser
 85 90 95

Leu Glu Ala Glu Asp Ala Ala Ala Tyr Tyr Cys His Gln Ser Ser Ser
 100 105 110

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

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

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

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

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

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

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

Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 11

<211> 1389
 <212> DNA
 <213> Homo sapiens

<400> 11
 atgggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt ctgtgccgag 60
 gtgcagctga tgcagtctgg agcagaggtg aaaaagcccg gggagtctct gaagatctcc 120
 tgtaaggggt ctggatacag cttttccttc cactggatcg cctgggtgcg ccagatgccc 180
 gggaaaggcc tggagtggat ggggatcatc catcctggtg cctctgatac cagatacagc 240
 ccgtccttcc aaggccaggt caccatctca gccgacaact ccaacagcgc cacctacctg 300
 cagtggagca gcctgaaggc ctcggacacc gccatgtatt tctgtgagag acaaagggaa 360
 ctcgactact ttgactactg gggccaggga accctggtca ccgtctctag tgcctccacc 420
 aaggggcccat cggctcttccc cctggcgccc tgctccagga gcacctccga gagcacagcg 480
 gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 540
 ggcgctctga ccagcggcgt gcacaccttc ccagctgtcc tacagtcctc aggactctac 600
 tccctcagca gcgtgggtgac cgtgccctcc agcaacttcg gcaccagac ctacacctgc 660
 aacgtagatc acaagcccag caacaccaag gtggacaaga cagttgagcg caaatgttgt 720
 gtcgagtgcc caccgtgccc agcaccacct gtggcaggac cgtcagtcct cctcttcccc 780
 ccaaaacca aggacacct catgatctcc cggaccctg aggtcacgtg cgtggtggtg 840
 gacgtgagcc acgaagacct cgaggtccag ttcaactggt acgtggacgg cgtggaggtg 900
 cataatgcca agacaaagcc acgggaggag cagttcaaca gcacgttccg tgtggtcagc 960
 gtcctcaccg ttgtgcacca ggactggctg aacggcaagg agtacaagt caaggtctcc 1020
 aacaaaggcc tcccagcccc catcgagaaa accatctcca aaaccaaagg gcagccccga 1080
 gaaccacagg tgtacacct gcccccatcc cgggaggaga tgaccaagaa ccaggtcagc 1140
 ctgacctgcc tgggtcaaagg cttctacccc agcgacatcg ccgtggagtg ggagagcaat 1200
 gggcagccgg agaacaacta caagaccaca cctcccatgc tggactccga cggctccttc 1260
 ttcctctaca gcaagctcac cgtggacaag agcaggtggc agcaggggaa cgtcttctca 1320
 tgctccgtga tgcattgagg tctgcacaac cactacacgc agaagagcct ctccctgtct 1380
 ccgggtaaa 1389

<210> 12
 <211> 463
 <212> PRT
 <213> Homo sapiens

<400> 12
 Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly
 1 5 10 15
 Val Cys Ala Glu Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys
 20 25 30

A-2063-WO-PCT_SeqList_ST25-092817

Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe
35 40 45

Ser Phe His Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu
50 55 60

Glu Trp Met Gly Ile Ile His Pro Gly Ala Ser Asp Thr Arg Tyr Ser
65 70 75 80

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

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

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

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
145 150 155 160

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

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

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

Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His
210 215 220

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
245 250 255

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
305 310 315 320

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

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

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

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

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

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
405 410 415

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

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
435 440 445

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

<210> 13
<211> 708
<212> DNA
<213> Homo sapiens

<400> 13
atggacatga ggggtccccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtgata tccagatgac ccaatcccct tctagtctgt ccgcttctgt gggcgacagg 120
gttacaataa cttgcaaagc gagccaggac atcaacaaat atgtggcttg gtatcagcaa 180
aaacccggca aggcaccaaa attgctcatt tattacacgt catggctcca gcctggtgta 240
cctagcaggt tttccggctc cggctcaggt accgacttta ctttcactat ctcctcactg 300
cagccggagg acattgccac atactactgt ctccaatatg ataacttggt gtatactttt 360
gggcaaggaa ctaagctcga gatcaaactg acgggtggctg caccatctgt cttcatcttc 420
ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
ttctatccca gagaggccaa agtacagtgg aagggtggata acgccctcca atcgggtaac 540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660

cagggcctga gctcgcccggt cacaaagagc ttcaacaggg gagagtgt

708

<210> 14
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 14

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

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

Ala Pro Lys Leu Leu Ile Tyr Tyr Thr Ser Trp Leu Gln Pro Gly Val
 65 70 75 80

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

Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln
 100 105 110

Tyr Asp Asn Leu Leu Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
 115 120 125

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

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160

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

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

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

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 Page 14

225

230

235

<210> 15
 <211> 1401
 <212> DNA
 <213> Homo sapiens

<400> 15
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
 cgctgtgagg ttcagcttgt ggagtctggc ggcggcctgg tgcagccagg cggttcactc 120
 aggctgagct gtgctgcatc agggttcacc ttcagccgtt actggatgaa ctgggtgcgg 180
 caagcaccgc ggaaaggcct ggagtgggtg gctcagattc gcttgaaaag tgacaattat 240
 gccactcact atgcagaaag cgtgaagggg cgctttacaa tttctagaga caacgccaaa 300
 aactcactgt acctgcagat gaacagcctc agagctgagg atacagctgt gtattattgt 360
 actgaggggc tcgactattg gggacagggc acgacagtga ccgtctctag tgcctccacc 420
 aagggcccat cggctcttccc cctggcaccc tcctccaaga gcacctctgg gggcacagcg 480
 gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 540
 ggcgccctga ccagcggcgt gcacaccttc ccggctgtcc tacagtcctc aggactctac 600
 tccctcagca gcgtggtgac cgtgccctcc agcagcttgg gcaccagac ctacatctgc 660
 aacgtgaatc acaagcccag caacaccaag gtggacaaga aagttgagcc caaatcttgt 720
 gacaaaactc acacatgccc accgtgcccga gcacctgaac tcctgggggg accgtcagtc 780
 ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcaca 840
 tgcgtggtgg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac 900
 ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac 960
 cgtgtggtca gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag 1020
 tgcaaggctc ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa 1080
 gggcagcccc gagaaccaca ggtgtacacc ctgccccat cccgggagga gatgaccaag 1140
 aaccaggcca gcctgacctg cctgggtcaa ggcttctatc ccagcgacat cgccgtggag 1200
 tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc 1260
 gacggctcct tcttctctta tagcaagctc accgtggaca agagcaggtg gcagcagggg 1320
 aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 1380
 ctctccctgt ctccgggtaa a 1401

<210> 16
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 16

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

A-2063-WO-PCT_SeqList_ST25-092817

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

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

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

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

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

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

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

Pro Gly Lys
465

<210> 17
<211> 708
<212> DNA
<213> Homo sapiens

<400> 17
atggacatga gggtcctcgc tcagctcctg gggtcctcgc tgctctgttt cccaggtgcc 60
agatgtgaca tccagatgac ccagtcctcca tcctcactgt ctgcatctgt aggagacaga 120
gtcaccatca cttgtcgggc gagtcagggt attagcaact ggtagcctg gtatcagcag 180
aaaccagaga aagcccctaa gtcctgatc tatgctgcat ccagtttgca aagtggggtc 240
ccatcaaggt tcagcggcag tggatctggg acagatttca ctctcaccat cagcagcctg 300
cagcctgaag attttgcaac ttattactgc caacagtatg atagttacc tcggacgttc 360
ggccaaggga ccaaggtgga aatcaaacga actgtggctg caccatctgt cttcatcttc 420

A-2063-WO-PCT_SeqList_ST25-092817

ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
 ttctatccca gagaggccaa agtacagtgg aagggtggata acgccctcca atcgggtaac 540
 tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
 ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660
 cagggcctga gctcgcccggt cacaaagagc ttcaacaggg gagagtgt 708

<210> 18
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 18

Met Asp Met Arg Val Leu Ala Gln Leu Leu Gly Leu Leu Leu Leu Cys
 1 5 10 15

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

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

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

Ala Pro Lys Ser Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val
 65 70 75 80

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

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

Tyr Asp Ser Tyr Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 115 120 125

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

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160

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

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

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr

195

200

205

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 19
 <211> 1398
 <212> DNA
 <213> Homo sapiens

<400> 19
 atggagtgg ggctgaactg ggttttcctt gttgctattt tagaagggtg cactgtgag 60
 gtgcagctgg tggagtctgg gggaggcttg gtccagcctg gggggtcctt gagactctcc 120
 tgtgcagctt ctggatttac ctttagtagt tattggatga gttgggtccg ccaggctcca 180
 gggaaagggc tggagtgggt ggcctacata aagcaagatg gaaatgagaa atactatgtg 240
 gactctgtga agggccgatt caccatctcc agagacaacg ccaagaactc attgtatctg 300
 caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgagag ggaagggata 360
 ctttggttcg gggacttacc gacgttcttg ggccagggaa ccctgggtcac cgtctctagt 420
 gcctccacca agggcccatc ggtcttcccc ctggcgccct gctccaggag cacctccgag 480
 agcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 540
 tggaactcag gcgctctgac cagcggcgtg cacaccttcc cagctgtcct acagtcctca 600
 ggactctact ccctcagcag cgtggtgacc gtgccctcca gcaacttcgg caccagacc 660
 tacacctgca acgtagatca caagcccagc aacaccaagg tggacaagac agttgagcgc 720
 aaatgtttgtg tcgagtggcc accgtgcca gcaccacctg tggcaggacc gtcagtcttc 780
 ctcttcccc caaaaccaa ggacaccctc atgatctccc ggaccctga ggtcacgtgc 840
 gtgggtgggtg acgtgagcca cgaagacccc gaggtccagt tcaactggta cgtggacggc 900
 gtggaggtgc ataatgcaa gacaaagcca cgggaggagc agttcaacag cacgttccgt 960
 gtggtcagcg tcctcaccgt tgtgcaccag gactggctga acggcaagga gtacaagtgc 1020
 aaggtctcca acaaaggcct cccagcccc atcgagaaaa catctccaa aaccaaaggg 1080
 cagccccgag aaccacaggt gtacaccctg ccccatccc gggaggagat gaccaagaac 1140
 caggtcagcc tgacctgcct ggtcaaaggc ttctaccca gcgacatcgc cgtggagtgg 1200
 gagagcaatg ggcagccgga gaacaactac aagaccacac ctcccatgct ggactccgac 1260
 ggctccttct tcctctacag caagctcacc gtggacaaga gcaggtggca gcaggggaac 1320
 gtcttctcat gtcctgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc 1380
 tccctgtctc cgggtaaa 1398

<210> 20
 <211> 466

<212> PRT
 <213> Homo sapiens

<400> 20

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

Val His Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

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

Glu Trp Val Ala Tyr Ile Lys Gln Asp Gly Asn Glu Lys Tyr Tyr Val
 65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Glu Gly Ile Leu Trp Phe Gly Asp Leu Pro Thr
 115 120 125

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

Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu
 145 150 155 160

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

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

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
 195 200 205

Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn
 210 215 220

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

Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly
 245 250 255

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

Thr Leu Pro Pro Ser Arg Glu Glu Met 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 Met
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> 21
<211> 723
<212> DNA
<213> Homo sapiens

<400> 21
atggacatga ggctccctgc tcagctcctg gggctgctaa tgctctgggt cccaggatcc 60

agtggggatg ttctgatgac tcagtctcca ctctccctgc ccgtcaccct tggacagccg 120

gcctccatct cctgcaggtc tagtcaaagc atcgtacaca gtaacggaaa cacctacttg 180

A-2063-WO-PCT_SeqList_ST25-092817

gagtggatc tgcagaggcc aggccaatct ccaaagctcc taatttataa ggtttctaac	240
cggttctctg ggggtcccaga cagattcagc ggcagtgggt caggcactga tttcacactg	300
aaaatcagca ggggtggaggc tgaggatggt ggggtttatt actgcttcca aggtagccac	360
gttcctctga cgttcggcgc agggaccaag ctggaaatca aacggactgt ggctgcacca	420
tctgtcttca tcttcccgcc atctgatgag cagttgaaat ctggaactgc ctctgttggtg	480
tgcctgctga ataacttcta tcccagagag gccaaagtac agtggaaggt ggataacgcc	540
ctccaatcgg gtaactccca ggagagtgtc acagagcagg acagcaagga cagcacctac	600
agcctcagca gcaccctgac gctgagcaaa gcagactacg agaaacacaa agtctacgcc	660
tgcgaagtca cccatcaggg cctgagctcg cccgtcacia agagcttcaa caggggagag	720
tgt	723

<210> 22
 <211> 241
 <212> PRT
 <213> Homo sapiens
 <400> 22

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

A-2063-WO-PCT_SeqList_ST25-092817

Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
165 170 175

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
180 185 190

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
195 200 205

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr
210 215 220

His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu
225 230 235 240

Cys

<210> 23
<211> 1410
<212> DNA
<213> Homo sapiens

<400> 23
atggacacac ttgctccac gtcctgctg ctgaccatcc cttcatgggt cttgtcccag 60
gtcaccttga aggagtctgg tcctgcgctg gtgaaaccca cacagaccct cacgctgacc 120
tgcaccttct ctgggttctc actccgcact agtggaatgg gcgtgggctg gatccgctcag 180
ccccaggaa aggccctgga gtggcttgcc cacatttggt gggatgatga taagagctac 240
aaccatctc tgaagagcca gtcaccatc tctaaggaca cctccaaaaa ccagggtggtc 300
cttacaatga ccaacatgga ccctgtggac acagccacat attactgtgc acgcagaaac 360
tattactacg acgactactt cgcctactgg ggccagggca ccctgggtcac cgtctctagt 420
gcctccacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg 480
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 540
tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca 600
ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcagcttggg caccagacc 660
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa agttgagccc 720
aatcttctg acaaaactca cacatgccca ccgtgcccag cacctgaact cctgggggga 780
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccct 840
gaggtcacat gcgtgggtgg ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg 900
tacgtggacg gcgtggagggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac 960
agcacgtacc gtgtgggtcag cgtcctcacc gtcctgcacc aggactgggt gaatggcaag 1020
gagtacaagt gcaaggcttc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc 1080
aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgccccatc ccgggatgag 1140

A-2063-WO-PCT_SeqList_ST25-092817

ctgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc	1200
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg	1260
ctggactccg acggctcctt cttcctctat agcaagctca ccgtggacaa gagcaggtgg	1320
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg	1380
cagaagagcc tctccctgtc tccgggtaaa	1410

<210> 24
 <211> 470
 <212> PRT
 <213> Homo sapiens

<400> 24

Met	Asp	Thr	Leu	Cys	Ser	Thr	Leu	Leu	Leu	Leu	Thr	Ile	Pro	Ser	Trp
1				5					10					15	

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

Pro	Thr	Gln	Thr	Leu	Thr	Leu	Thr	Cys	Thr	Phe	Ser	Gly	Phe	Ser	Leu
		35				40						45			

Arg	Thr	Ser	Gly	Met	Gly	Val	Gly	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys
50						55					60				

Ala	Leu	Glu	Trp	Leu	Ala	His	Ile	Trp	Trp	Asp	Asp	Asp	Lys	Ser	Tyr
65					70					75					80

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

Asn	Gln	Val	Val	Leu	Thr	Met	Thr	Asn	Met	Asp	Pro	Val	Asp	Thr	Ala
			100					105					110		

Thr	Tyr	Tyr	Cys	Ala	Arg	Arg	Asn	Tyr	Tyr	Tyr	Asp	Asp	Tyr	Phe	Ala
		115					120					125			

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

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

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

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

Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

195

200

205

Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn
 210 215 220
 Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro
 225 230 235 240
 Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
 245 250 255
 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 260 265 270
 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 275 280 285
 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
 290 295 300
 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
 305 310 315 320
 Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
 325 330 335
 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
 340 345 350
 Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
 355 360 365
 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
 370 375 380
 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 385 390 395 400
 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
 405 410 415
 Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 420 425 430
 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 435 440 445
 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 450 455 460
 Ser Leu Ser Pro Gly Lys

465

470

<210> 25
 <211> 705
 <212> DNA
 <213> Homo sapiens

<400> 25
 atggaaccc cggcgagct gctgtttctg ctgctgctgt ggctgccgga taccaccggc 60
 gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
 ctctcctgca gggccagtca gagtgtagc agcagctact tcgcctggta ccaacagaaa 180
 cctggccagg ctcccaggct cctcatctat ggtacatcca gcagggccac tggcatccca 240
 gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccgtcag cagactggag 300
 cctgaggatt ttgcagtgtg ttactgtcag cagtatgata ggtcacctcg gacgttcggc 360
 caagggacca aggtggaaat caaacgtacg gtggctgcac catctgtctt catcttcccg 420
 ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
 tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
 caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
 acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
 ggctgagct cgccggtcac aaagagcttc aacaggggag agtgt 705

<210> 26
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 26

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 27
<211> 1389
<212> DNA
<213> Homo sapiens

<400> 27
atggattgga cctggcgtat tctgtttctg gtggcgggcg cgaccggcgc gcatagccag 60
gtgcagttgg tgcagtctgg ggctgcggtg aagaagcctg gggcctcagt gaaggtctcc 120
tgcaaggctt ctggatacac cttcaccggc tactatatac actgggtgcg acaggcccct 180
ggacaagggc ttgagtggat gggatggatc aaccctaaca gtggtggcac aaactatgca 240
caaaagtttc agggcagggc caccatgacc agggacacgt ccatcagcac agcctccatg 300
gaactgagca ggctgagatc tgacgacacg gccgtttatt tctgtgagag agatcggtgg 360
ctggatgctt ttgatatctg gggccaaggg acaatggtca ccgtctcttc tgctagcacc 420
aagggcccat cggctctccc cctggcgccc tgctccagga gcacctccga gagcacagcg 480
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 540
ggcgctctga ccagcggcgt gcacaccttc ccagctgtcc tacagtcctc aggactctac 600
tccctcagca gcgtggtgac cgtgccctcc agcaacttcg gcaccagac ctacacctgc 660
aacgtagatc acaagccag caacaccaag gtggacaaga cagttgagcg caaatgttgt 720
gtcgagtgcc caccgtgccc agcaccacct gtggcaggac cgtcagtctt cctcttcccc 780
ccaaaacca aggacaccct catgatctcc cggaccctg aggtcacgtg cgtggtggtg 840
gacgtgagcc acgaagacct cgaggtccag ttcaactggt acgtggacgg cgtggaggtg 900

A-2063-WO-PCT_SeqList_ST25-092817

cataatgccagacaaaagccacgggaggagcagttcaacagcacgttccgtgtggtcagc960
gtcctcaccgttgtgcaccegactggctgaacggcaaggagtacaagtgcaaggtctcc1020
aaciaaggcc tcccagcccc catcgagaaa accatctcca aaaccaaagg gcagccccga1080
gaaccacagg tgtacaccct gcccccatcc cgggaggaga tgaccaagaa ccaggtcagc1140
ctgacctgcc tgggtcaaagg cttctacccc agcgacatcg ccgtggagtggagagcaat1200
gggcagccgg agaacaacta caagaccaca cctcccatgc tggactccga cggctccttc1260
ttcctctaca gcaagctcac cgtggacaag agcaggtggc agcaggggaa cgtcttctca1320
tgctccgtga tgcattgaggc tctgcacaac cactacacgc agaagagcct ctccctgtct1380
ccgggtaaa1389

<210> 28
<211> 463
<212> PRT
<213> Homo sapiens

<400> 28

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

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

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

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

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

Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser
85 90 95

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

Tyr Phe Cys Ala Arg Asp Arg Trp Leu Asp Ala Phe Asp Ile Trp Gly
115 120 125

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
145 150 155 160

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
Page 28

165

170

175

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

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

Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His
 210 215 220

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
 245 250 255

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

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

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

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
 305 310 315 320

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

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

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

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

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

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
 405 410 415

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

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 Page 29

435

440

445

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

<210> 29
 <211> 705
 <212> DNA
 <213> Homo sapiens

<400> 29
 atggaaaccc cagctcagct tctcttcctc ctgctactct ggctcccaga taccaccgga 60
 gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
 ctctcctgca gggccagtca gagtgttagc agcggctact taacctggta ccagcagaaa 180
 cctggccagg ctccagact cctcatctat ggtgcatcca gcagggccac tggcatccca 240
 gacaggttca gtggcagtgg gtctgggacg gacttcactc tcaccatcag cagactggag 300
 cctgaagatt ttgcagtgta ttactgtcag cagtatggta actcactgag caggtttggc 360
 caggggacca agctggagat caaacgtacg gtggctgcac catctgtctt catcttcccg 420
 ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
 tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
 caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
 acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
 ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 30
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 30

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
 1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
 20 25 30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
 35 40 45

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

Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro
 65 70 75 80

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 31
<211> 1422
<212> DNA
<213> Homo sapiens

<400> 31
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtcagg tgcagctggt ggagtctggg ggaggcgtgg tccagcctgg gaggtccctg 120
agactctcct gtgcagcgtc tggattcacc ttcagtagct atggcatgca ctgggtccgc 180
caggctccag gcaaggggct ggagtgggtg gcagttatat ggtatgatgg aagtaataaa 240
tactatgcag actccgtgaa gggccgattc atcatctcca gagataaatc caagaacacg 300
ctgtatctgc aaatgaacag cctgagagcc gaggacacgg ctgtgtatta ctgtgcgaga 360
gcgggggggta tagcagcagc tggcctctac tactactacg gtatggacgt ctggggccaa 420
gggaccacgg tcaccgtctc tagtgcctcc accaagggcc catcggtctt cccctggcg 480
ccctgctcca ggagcacctc cgagagcaca gcggccctgg gctgcctggt caaggactac 540
ttccccgaac cggtgacggt gtcgtggaac tcaggcgctc tgaccagcgg cgtgcacacc 600
ttcccagctg tcctacagtc ctcaggactc tactccctca gcagcgtggt gaccgtgccc 660
tccagcaact tcggcaccca gacctacacc tgcaacgtag atcacaagcc cagcaacacc 720
aaggtggaca agacagttga gcgcaaattg tgtgtcgagt gccaccctg cccagcacca 780

A-2063-WO-PCT_SeqList_ST25-092817

```

cctgtggcag gaccgtcagt cttcctcttc ccccaaaaac ccaaggacac cctcatgatc      840
tcccggaccc ctgaggtcac gtgctgtgtg gtggacgtga gccacgaaga ccccgaggtc      900
cagttcaact ggtacgtgga cggcgtggag gtgcataatg ccaagacaaa gccacgggag      960
gagcagttca acagcacgtt ccgtgtggtc agcgtcctca ccgttgtgca ccaggactgg     1020
ctgaacggca aggagtacaa gtgcaaggtc tccaacaaag gcctcccagc ccccatcgag     1080
aaaaccatct ccaaaaccaa agggcagccc cgagaaccac aggtgtacac cctgccccca     1140
tcccgggagg agatgaccaa gaaccaggtc agcctgacct gcctgggtcaa aggcttctac     1200
cccagcgaca tcgccgtgga gtgggagagc aatgggcagc cggagaacaa ctacaagacc     1260
acacctccca tgctggactc cgacggctcc ttcttctctt acagcaagct caccgtggac     1320
aagagcaggt ggcagcaggg gaacgtcttc tcatgctccg tgatgcatga ggctctgcac     1380
aaccactaca cgcagaagag cctctccctg tctccgggta aa                        1422

```

<210> 32
 <211> 474
 <212> PRT
 <213> Homo sapiens

<400> 32

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 35 40 45

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

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

Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Ile Ile Ser Arg Asp Lys
 85 90 95

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

Thr Ala Val Tyr Tyr Cys Ala Arg Ala Gly Gly Ile Ala Ala Ala Gly
 115 120 125

Leu Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val
 130 135 140

Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala

Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe

420

425

430

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

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 450 455 460

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470

<210> 33
 <211> 806
 <212> DNA
 <213> Homo sapiens

<400> 33
 atgacatcca ctttgccctt ctctccacag gtgtccactc ccagggtccaa gtttaaacgg 60
 atctctagcg aattccctct agagtcgact agaccacat ggacatgagg gtgcccgtc 120
 agtccttggg gtcctgctg ctgtggctga gaggtgcgcg ctgttcttct gagctgactc 180
 aggaccctac tgtgtctgtg gccttgggac agacagtcaa aatcacatgc caaggagaca 240
 gcctcagaag tttttatgca agctggtacc agcagaagcc aggacaggcc cctgtacttg 300
 tcttctatgg taaaaacaac cggccctcag ggatcccaga ccgattctct ggctccagct 360
 caggaaacac agcttccttg accatcactg gggctcaggc ggaagatgag gctgactatt 420
 attgtaattc ccgggacagc agtggttacc atctggtact cggcggaggg accaagctga 480
 ccgtcctagg tcagcccaag gccaaccca ctgtcactct gttcccggcc tcctctgagg 540
 agtccaagc caacaaggcc aactagtgt gtctgatcag tgacttctac ccgggagctg 600
 tgacagtggc ctggaaggca gatggcagcc ccgtcaaggc gggagtggag accaccaaac 660
 cctccaaaca gagcaacaac aagtacgcgg ccagcagcta cctgagcctg acgcccagagc 720
 agtggaaagtc ccacagaagc tacagctgcc aggtcacgca tgaaggaggc accgtggaga 780
 agacagtggc ccctacagaa tgttca 806

<210> 34
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 34

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Leu Arg Ser Phe Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

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

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

Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg
100 105 110

Asp Ser Ser Val Tyr His Leu Val Leu Gly Gly Gly Thr Lys Leu Thr
115 120 125

Val Leu Gly Gln Pro Lys Ala Asn Pro Thr Val Thr Leu Phe Pro Pro
130 135 140

Ser Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile
145 150 155 160

Ser Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly
165 170 175

Ser Pro Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser
180 185 190

Asn Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln
195 200 205

Trp Lys Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser
210 215 220

Thr Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
225 230 235

<210> 35
<211> 1434
<212> DNA
<213> Homo sapiens

<400> 35
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtcagg tgcagttggt gcagtcctggg gctgaggtga agaagcctgg ggcctcagtg 120
aaggctctcct gcaaggcttc tggatacacc ttcaccggct actatatgca ctgggtgcga 180
caggcccctg gacaagggct tgagtggatg ggatggatca accctaacag tggtggcaca 240
aactatgcac agaagtttca gggcaggggc accatgacca gggacacgct catcagcaca 300
gcctacatgg agctgagcag gctgagatct gacgacacgg ccgtgtattt ctgtgcgaga 360
gatcaaata gttattattat gcttcgggga gtttttcccc cttactatta cggtatggac 420

A-2063-WO-PCT_SeqList_ST25-092817

```

gtctggggcc aaggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc      480
ttccccctgg cgccctgctc caggagcacc tccgagagca cagcggccct gggctgcctg      540
gtcaaggact acttccccga accggtgacg gtgtcgtgga actcaggcgc tctgaccagc      600
ggcgtgcaca ccttcccagc tgtcctacag tcctcaggac tctactccct cagcagcgtg      660
gtgaccgtgc cctccagcaa cttcggcacc cagacctaca cctgcaacgt agatcacaag      720
cccagcaaca ccaagggtga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg      780
tgcccagcac cacctgtggc aggaccgtca gtcttctctt tcccccaaa acccaaggac      840
accctcatga tctcccgac ccctgaggtc acgtgcgtgg tggtagcgt gagccacgaa      900
gaccccgagg tccagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca      960
aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg     1020
caccaggact ggctgaacgg caaggagtac aagtgcgaagg tctccaacaa aggcctccca     1080
gcccccatcg agaaaacat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac     1140
accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc     1200
aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac     1260
aactacaaga ccacacctcc catgctggac tccgacggct ccttcttctt ctacagcaag     1320
ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat     1380
gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa           1434

```

<210> 36
 <211> 478
 <212> PRT
 <213> Homo sapiens

<400> 36

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

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

Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr
 65 70 75 80

Asn Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr
 85 90 95

Ser Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp

100

105

110

Thr Ala Val Tyr Phe Cys Ala Arg Asp Gln Met Ser Ile Ile Met Leu
 115 120 125
 Arg Gly Val Phe Pro Pro Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
 130 135 140
 Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 145 150 155 160
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 165 170 175
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 180 185 190
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 195 200 205
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 210 215 220
 Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys
 225 230 235 240
 Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val
 245 250 255
 Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe
 260 265 270
 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
 275 280 285
 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
 290 295 300
 Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
 305 310 315 320
 Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val
 325 330 335
 Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
 340 345 350
 Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
 355 360 365
 Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro

370

375

380

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
 385 390 395 400

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

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp
 420 425 430

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
 435 440 445

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
 450 455 460

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470 475

<210> 37
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 37
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc 60
 agatgtgata ttgtgatgac tcagtctcca ctctccctgc ccgtcacccc tggagagccg 120
 gcctccatct cctgcaggtc tagtcagagc ctctgcata gtaatggata caactatttg 180
 gattggtacc tgcagaagcc agggcagtct ccacagctcc tgatctatctt gggtttctaat 240
 cgggcctccg ggggtccctga cagggttcagt ggcagtggat caggcacaga ttttactctg 300
 aaaatcagca gagggtggaggc tgaggatgtt ggggtttatt actgcatgca agctctacaa 360
 actccgctca ctttcggcgg agggaccaag gtagagatca aacggactgt ggctgcacca 420
 tctgtcttca tcttcccgcc atctgatgag cagttgaaat ctggaactgc ctctgtttgtg 480
 tgcctgctga ataacttcta tcccagagag gccaaagtac agtggaaggt ggataacgcc 540
 ctccaatcgg gtaactccca ggagagtgtc acagagcagg acagcaagga cagcacctac 600
 agcctcagca gcaccctgac gctgagcaaa gcagactacg agaaacacaa agtctacgcc 660
 tgcgaagtca cccatcaggg cctgagctcg cccgtcacia agagcttcaa caggggagag 720
 tgt 723

<210> 38
 <211> 241
 <212> PRT
 <213> Homo sapiens

<400> 38

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp

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

Cys

<210> 39
 <211> 1425
 <212> DNA
 <213> Homo sapiens

A-2063-WO-PCT_SeqList_ST25-092817

```

<400> 39
atggacatga ggggtgccccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc      60
agatgtgagg tgcagctggt ggagtctggg ggaggcttgg tccagcctgg ggggtccctg      120
agactctcct gtgcagcctc cggattcacc tttagtagct attggatgag ctgggtccgc      180
caggctccag ggaaggggct ggagtgggtg gccagcataa aacaagatgg aagtgagaaa      240
tactatgtgg actctgtgaa gggccgattc accatctcca gagacaacgc caggaactca      300
ctgtatctgc aaatgaacag cctgagagcc gaggacacgg ctgtgtatta ctgtgcgaga      360
gatcttgtat taatgggtgta tgatatagac tactactact acggtatgga cgtctggggc      420
caagggacca cggtcaccgt ctctcagcc tccaccaagg gcccatcggg cttccccctg      480
gcgccctgct ccaggagcac ctccgagagc acagcggccc tgggctgcct ggtcaaggac      540
tacttccccg aaccggtgac ggtgtcgtgg aactcaggcg ctctgaccag cggcgtgcac      600
accttcccag ctgtcctaca gtcctcagga ctctactccc tcagcagcgt ggtgaccgtg      660
ccctccagca acttcggcac ccagacctac acctgcaacg tagatcacao gccagcaac      720
accaaggtgg acaagacagt tgagcgcaaa tgttgtgtcg agtgcccacc gtgcccagca      780
ccacctgtgg caggaccgtc agtcttctc tccccccaa aaccaagga caccctcatg      840
atctcccga cccctgaggt cacgtgcgtg gtggtggacg tgagccacga agaccccgag      900
gtccagttca actggtacgt ggacggcgtg gaggtgcata atgccaagac aaagccacgg      960
gaggagcagt tcaacagcac gttccgtgtg gtcagcgtcc tcaccgttgt gcaccaggac     1020
tggctgaacg gcaaggagta caagtgaag gtctccaaca aaggcctccc agccccatc     1080
gagaaaacca tctccaaaac caaagggcag ccccgagaac cacaggtgta caccctgccc     1140
ccatccccgg aggagatgac caagaaccag gtcagcctga cctgcctggg caaaggcttc     1200
taccacagcg acatcgccgt ggagtgggag agcaatgggc agccggagaa caactacaag     1260
accacacctc ccatgctgga ctccgacggc tccttcttcc tctacagcaa gtcaccgtg     1320
gacaagagca ggtggcagca ggggaacgtc ttctcatgct cctgatgca tgaggctctg     1380
cacaaccact acacgcagaa gagcctctcc ctgtctccgg gtaaa                       1425

```

```

<210> 40
<211> 475
<212> PRT
<213> Homo sapiens

```

<400> 40

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

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

Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
35 40 45

A-2063-WO-PCT_SeqList_ST25-092817

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

A-2063-WO-PCT_SeqList_ST25-092817

Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val
325 330 335

Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
340 345 350

Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys
355 360 365

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
370 375 380

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
385 390 395 400

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
405 410 415

Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe
420 425 430

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
435 440 445

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
450 455 460

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465 470 475

<210> 41
<211> 723
<212> DNA
<213> Homo sapiens

<400> 41
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc 60
agatgtgata ttgtgatgac tcagtctcca ctctccctgc ccgtcacccc tggagagccg 120
gcctccatct cctgcaggtc tagtcagagc ctctgcata gtaatgggta caactatttg 180
gattggtacc tgcagaagcc agggcagtct ccacagctcc tgatctatatt gggttctaata 240
cgggcctccg ggggtccctga caggttcagt ggcagtggat caggcacaca tcttacactg 300
aaaatcagca gagtggaggc tgaggatggt ggagtttatt actgcatgca aactctacaa 360
actccgctca ctttcggcgg agggaccaag gtagagatca aacggactgt ggctgcacca 420
tctgtcttca tcttcccgcg atctgatgag cagttgaaat ctggaactgc ctctgtttgtg 480
tgctgtctga ataacttcta tcccagagag gccaaagtac agtggaaggt ggataacgcc 540
ctccaatcgg gtaactccca ggagagtgtc acagagcagg acagcaagga cagcacctac 600
agcctcagca gcaccctgac gctgagcaaa gcagactacg agaaacacaa agtctacgcc 660

tgcgaagtca cccatcaggg cctgagctcg cccgtcacaa agagcttcaa caggggagag 720
 tgt 723

<210> 42
 <211> 241
 <212> PRT
 <213> Homo sapiens

<400> 42

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

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

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

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

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

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

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

Tyr Tyr Cys Met Gln Thr Leu Gln Thr Pro Leu Thr Phe Gly Gly Gly
115 120 125

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

Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val
145 150 155 160

Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
165 170 175

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
180 185 190

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
195 200 205

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr
210 215 220

A-2063-WO-PCT_SeqList_ST25-092817

His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu
225 230 235 240

Cys

<210> 43
<211> 1425
<212> DNA
<213> Homo sapiens

<400> 43
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc 60
agatgtgagg tgcagctggt ggagtctggg ggaggcttgg tccagcctgg ggggtccctg 120
agactctcct gtgcagcctc cggattcacc tttagtaact attggatgag ctgggtccgc 180
caggctccag ggaaggggct ggagtgggtg gccagcataa aacaagatgg aagtgagaaa 240
tactatgtgg actctgtgaa gggccgattc gccatctcca gagacaacgc caagaactca 300
ctgtttctgc aaatgaacag cctgagagcc gaggacacgg ctgtgtatta ctgtgcgaga 360
gatcttgtag taatgggtga tgatatagac tactactact acggtatgga cgtctggggc 420
caagggacca cggtcaccgt ctctcagcc tccaccaagg gcccatcggt cttccccctg 480
gcgccctgct ccaggagcac ctccgagagc acagcggccc tgggctgcct ggtcaaggac 540
tacttccccg aaccggtgac ggtgtcgtgg aactcaggcg ctctgaccag cggcgtgcac 600
accttcccag ctgtcctaca gtcctcagga ctctactccc tcagcagcgt ggtgaccgtg 660
ccctccagca acttcggcac ccagacctac acctgcaacg tagatcaca gcccagcaac 720
accaaggtgg acaagacagt tgagcgaaa tgttgtgtcg agtgcccacc gtgcccagca 780
ccacctgtgg caggaccgtc agtcttctc tttccccaa aaccaagga caccctcatg 840
atctcccga cccctgaggt cacgtgcgtg gtgggtggacg tgagccacga agaccccag 900
gtccagttca actggtacgt ggacggcgtg gaggtgcata atgccaagac aaagccacgg 960
gaggagcagt tcaacagcac gttccgtgtg gtcagcgtcc tcaccgttgt gcaccaggac 1020
tggtgaacg gcaaggagta caagtgaag gtctccaaca aaggcctccc agccccatc 1080
gagaaaacca tctccaaaac caaagggcag ccccgagaac cacaggtgta caccctgccc 1140
ccatcccggg aggagatgac caagaaccag gtcagcctga cctgcctggt caaaggcttc 1200
taccacagcg acatcgccgt ggagtgggag agcaatgggc agccggagaa caactacaag 1260
accacacctc ccatgctgga ctccgacggc tccttcttcc tctacagcaa gctcaccgtg 1320
gacaagagca ggtggcagca ggggaacgtc ttctcatgct ccgtgatgca tgaggctctg 1380
cacaaccact acacgcagaa gagcctctcc ctgtctccgg gtaaa 1425

<210> 44
<211> 475
<212> PRT
<213> Homo sapiens

<400> 44

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 35 40 45

Phe Thr Phe Ser Asn Tyr Trp Met Ser Trp Val Arg Gln Ala Pro Gly
 50 55 60

Lys Gly Leu Glu Trp Val Ala Ser Ile Lys Gln Asp Gly Ser Glu Lys
 65 70 75 80

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

Ala Lys Asn Ser Leu Phe Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Leu Val Leu Met Val Tyr Asp
 115 120 125

Ile Asp Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr
 130 135 140

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

Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys
 165 170 175

Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
 180 185 190

Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
 195 200 205

Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn
 210 215 220

Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn
 225 230 235 240

Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro
 245 250 255

Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro
 Page 45

260

265

270

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
 275 280 285

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn
 290 295 300

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 305 310 315 320

Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val
 325 330 335

Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
 340 345 350

Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys
 355 360 365

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
 370 375 380

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
 385 390 395 400

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
 405 410 415

Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe
 420 425 430

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
 435 440 445

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
 450 455 460

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470 475

<210> 45

<211> 705

<212> DNA

<213> Homo sapiens

<400> 45

atgacttggt ctccactgct gctgactctg ctgattcatt gtactggttc ttgggcgcag 60

tctgtgttga cgcagccgcc ctcaagtgtct gcggccccag gacagaaggt caccatctcc 120

tgctctggaa gcagctccaa cattgggaat aattatgtat cctggtacca gcagctccca 180

ggaacagccc ccaaactcct catttatgac aataataagc gaccctcagg gattcctgac 240

A-2063-WO-PCT_SeqList_ST25-092817

```

cgattctctg gctccaagtc tggcacgtca accaccctgg gcatcaccgg actccagact      300
ggggacgagg ccgattatta ctgcggaaca tgggatatgcc gcctgagtgc tgtgggttttc      360
ggcggaggga ccaagctgac cgtcctaggt cagcccaagg ccaacccacac tgtcactctg      420
ttcccgccct cctctgagga gctccaagcc aacaaggcca cactagtgtg tctgatcagt      480
gacttctacc cgggagctgt gacagtggcc tggaaggcag atggcagccc cgtcaaggcg      540
ggagtggaga ccaccaaacc ctccaaacag agcaacaaca agtacgcggc cagcagctac      600
ctgagcctga cgcccagca gtggaagtcc cacagaagct acagctgcca ggtcacgcat      660
gaaggagca ccgtggagaa gacagtggcc cctacagaat gttca                          705

```

<210> 46
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 46

Met Thr Cys Ser Pro Leu Leu Leu Thr Leu Leu Ile His Cys Thr Gly
 1 5 10 15

Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala
 20 25 30

Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile
 35 40 45

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

Lys Leu Leu Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp
 65 70 75 80

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Thr Thr Leu Gly Ile Thr
 85 90 95

Gly Leu Gln Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp
 100 105 110

Ser Arg Leu Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val
 115 120 125

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

Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser
 145 150 155 160

Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser
 165 170 175

A-2063-WO-PCT_SeqList_ST25-092817

Pro Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn
180 185 190

Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp
195 200 205

Lys Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr
210 215 220

Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
225 230 235

<210> 47
<211> 1425
<212> DNA
<213> Homo sapiens

<400> 47
atggaatttg gtctgtcttg ggtatttctg gttgctctgc tgcgtggcgt gcagtgccag 60
gtgcagctgg tggaatctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc 120
tgtgcagcct ctggattcac cttcagtagc tttggcatgc actgggtccg ccaggctcca 180
ggcaaggggc tggagtgggt ggcagttata tcatttgatg gaagtattaa gtattctgta 240
gactccgtga agggccgatt caccatctcc agagacaatt caaagaacac gctgtttctg 300
caaatgaaca gcctgcgagc cgaggacacg gctgtgtatt actgtgagag agatcggctc 360
aattactatg atagtagtgg ttattatcac tacaataact acggtatggc cgtctggggc 420
caagggacca cggtcaccgt ctctagtgcc tccaccaagg gcccatcggg cttccccctg 480
gcgccctgct ccaggagcac ctccgagagc acagcggccc tgggctgcct ggtcaaggac 540
tacttccccg aaccggtgac ggtgtcgtgg aactcaggcg ctctgaccag cggcgtgcac 600
accttcccag ctgtcctaca gtcctcagga ctctactccc tcagcagcgt ggtgaccgtg 660
ccctccagca acttcggcac ccagacctac acctgcaacg tagatcaca gccagcaac 720
accaaggtgg acaagacagt tgagcgaaa tgttgtgtcg agtgcccacc gtgcccagca 780
ccacctgtgg caggaccgtc agtcttctc tccccccaa aaccaagga caccctcatg 840
atctcccga cccctgaggt cacgtgcgtg gtggtggacg tgagccacga agaccccgag 900
gtccagttca actggtacgt ggacggcgtg gaggtgcata atgccaagac aaagccacgg 960
gaggagcagt tcaacagcac gttccgtgtg gtcagcgtcc tcaccgttgt gcaccaggac 1020
tggctgaacg gcaaggagta caagtgaag gtctccaaca aaggcctccc agccccatc 1080
gagaaaacca tctccaaaac caaaggcag ccccgagaac cacaggtgta caccctgccc 1140
ccatccccgg aggagatgac caagaaccag gtcagcctga cctgcctggg caaaggcttc 1200
taccacagcg acatcgccgt ggagtgggag agcaatgggc agccggagaa caactacaag 1260
accacacctc ccatgctgga ctccgacggc tccttcttcc tctacagcaa gctcaccgtg 1320
gacaagagca ggtggcagca ggggaacgtc ttctcatgct ccgtgatgca tgaggctctg 1380

cacaaccact acacgcagaa gagcctctcc ctgtctccgg gtaaa

1425

<210> 48
 <211> 475
 <212> PRT
 <213> Homo sapiens

<400> 48

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

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

Ser Ser Phe Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60

Glu Trp Val Ala Val Ile Ser Phe Asp Gly Ser Ile Lys Tyr Ser Val
 65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Asp Arg Leu Asn Tyr Tyr Asp Ser Ser Gly Tyr
 115 120 125

Tyr His Tyr Lys Tyr Tyr Gly Met Ala Val Trp Gly Gln Gly Thr Thr
 130 135 140

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

Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys
 165 170 175

Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
 180 185 190

Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
 195 200 205

Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn
 210 215 220

Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn
 Page 49

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

```
<210> 49
<211> 702
<212> DNA
<213> Homo sapiens
```

A-2063-WO-PCT_SeqList_ST25-092817

```

<400> 49
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc      60
agatgttatg agctgactca gccaccctca gtgtccgtgt cccaggaca gacagccacc      120
atcacctgct ctggagataa attgggggaa agatatgcgt cttggtatca gcagaggcca      180
ggccagtccc ctgtactggt catctatcaa gatatcaagc ggccctcagg gatccctgag      240
cgattctctg gctccaactc tgggaacaca gccactctga ccatcagcgg gacccaggct      300
atggatgagg ctgactatct ctgtcaggcg tggtagagca gcaccaatgt gcttttcggc      360
ggagggacca agctgaccgt cctaggtcag cccaaggctg cccctcgggt cactctgttc      420
ccgccctcct ctgaggagct tcaagccaac aaggccacac tgggtgtgtct cataagtgac      480
ttctacccgg gagccgtgac agtggcctgg aaggcagata gcagccccgt caaggcggga      540
gtggagacca ccacaccctc caaacaagc aacaacaagt acgcggccag cagctatctg      600
agcctgacgc ctgagcagt gaagtccac agaagctaca gctgccaggt cacgcatgaa      660
gggagcaccg tggagaagac agtggcccct acagaatgtt ca                          702

```

```

<210> 50
<211> 234
<212> PRT
<213> Homo sapiens

```

<400> 50

```

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1          5          10          15

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

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

Gly Glu Arg Tyr Ala Ser Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro
50          55          60

Val Leu Val Ile Tyr Gln Asp Ile Lys Arg Pro Ser Gly Ile Pro Glu
65          70          75          80

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

Gly Thr Gln Ala Met Asp Glu Ala Asp Tyr Phe Cys Gln Ala Trp Tyr
          100          105          110

Ser Ser Thr Asn Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
          115          120          125

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

```

A-2063-WO-PCT_SeqList_ST25-092817

Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
145 150 155 160

Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro
165 170 175

Val Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn
180 185 190

Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
195 200 205

Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val
210 215 220

Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
225 230

<210> 51
<211> 1398
<212> DNA
<213> Homo sapiens

<400> 51
atggagtttg ggctgagctg ggttttcctc gttgctcttt taagaggtgt ccagtgtcag 60
gtgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc 120
tgtgcagcgt ctggattcac cttcagtagc tatggcatgc actgggtccg ccaggctcca 180
ggcaaggggc tggagtgggt ggcagttata tggatatgctg aaagtaataa atactacgca 240
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctg 300
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgctgag agcccaggag 360
ggtatagccc ctgacgcttt tgatatctgg ggccaaggaa caatgggtcac cgtctcttca 420
gcctccacca agggcccatc ggtcttcccc ctggcgccct gctccaggag cacctccgag 480
agcacagcgg ccctgggctg cctggtcaag gactacttcc ccgaaccggt gacggtgtcg 540
tggaactcag gcgctctgac cagcggcgtg cacaccttcc cagctgtcct acagtcttca 600
ggactctact ccctcagcag cgtggtgacc gtgccctcca gcaacttcg caccagacc 660
tacacctgca acgtagatca caagcccagc aacaccaagg tggacaagac agttgagcgc 720
aaatgttttg tcgagtgcc accgtgccc gcaccacctg tggcaggacc gtcagtcttc 780
ctcttcccc caaaaccaa ggacaccctc atgatctccc ggaccctga ggtcacgtgc 840
gtggtggtgg acgtgagcca cgaagacccc gaggtccagt tcaactggt cgtggacggc 900
gtggaggtgc ataatgcaa gacaaagcca cgggaggagc agttcaacag cacgttccgt 960
gtggtcagcg tcctcaccgt tgtgcaccag gactggctga acggcaagga gtacaagtgc 1020
aaggtctcca acaaaggcct cccagcccc atcgagaaaa ccatctcaa aaccaaaggg 1080
cagccccgag aaccacaggt gtacaccctg ccccatccc gggaggagat gaccaagaac 1140

A-2063-WO-PCT_SeqList_ST25-092817

caggtcagcc tgacctgcct ggtcaaaggc ttctacccca gcgacatcgc cgtggagtgg 1200
gagagcaatg ggcagccgga gaacaactac aagaccacac ctcccatgct ggactccgac 1260
ggctccttct tcctctacag caagctcacc gtggacaaga gcaggtggca gcaggggaac 1320
gtcttctcat gctccgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc 1380
tccctgtctc cgggtaaa 1398

<210> 52
<211> 466
<212> PRT
<213> Homo sapiens

<400> 52

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

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

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

Glu Trp Val Ala Val Ile Trp Tyr Ala Glu Ser Asn Lys Tyr Tyr Ala
65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Ala Gln Glu Gly Ile Ala Pro Asp Ala Phe Asp
115 120 125

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

Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu
145 150 155 160

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

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

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val

195

200

205

Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn
 210 215 220

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

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

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

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

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

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

Thr Leu Pro Pro Ser Arg Glu Glu Met 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 Met
 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> 53
 <211> 702
 <212> DNA
 <213> Homo sapiens

<400> 53
 atgggggtcaa ccgccatcct tggcctcctc ctggctgtcc tgcagggagg gcgcgccgaa 60
 attgtgttga cgcagtctcc aggcaccctg tctttgtctc caggggaaag agccaccctc 120
 tcctgcaggg ccagtcagag tgtagcagc agctacttag cctggcacca gcagaaacct 180
 ggccaggctc ccaggctcct catctatggg gcatccagca gggccactgg catcccagac 240
 aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag actggagcct 300
 gaagattttg cagtgtatta ctgtcagcag tatggttagct caccgtggac gttcggccaa 360
 gggaccaagg tggaaatcaa acgtacggtg gctgcacat ctgtcttcat cttcccgcca 420
 tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 480
 cccagagagg ccaaagtaca gtggaagggtg gataacgccc tccaatcggg taactcccag 540
 gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 600
 ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc 660
 ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gt 702

<210> 54
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 54
 Met Gly Ser Thr Ala Ile Leu Gly Leu Leu Leu Ala Val Leu Gln Gly
 1 5 10 15
 Gly Arg Ala Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu
 20 25 30
 Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val
 35 40 45
 Ser Ser Ser Tyr Leu Ala Trp His Gln Gln Lys Pro Gly Gln Ala Pro
 50 55 60
 Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp
 65 70 75 80
 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 85 90 95
 Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly
 100 105 110

A-2063-WO-PCT_SeqList_ST25-092817

Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val 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> 55
<211> 1389
<212> DNA
<213> Homo sapiens

<400> 55
atggggtcaa ccgccatcct tggcctcctc ctggctgtcc tgcagggagg gcgcgccgag 60
gtgcagctat tggagtctgg gggaggcttg gtacagcctg ggggggtccct gagactctcc 120
tgtgcagcct ctggattcac ctttagcacc tatgtcatga gctgggtccg ccaggctcca 180
gggaaggggc tggagtgggt ctcaagtatt agtggtagtgt gtcttggctc atactacgca 240
gactccgtga agggccggtt caccatctcc agagacaatt ccaagaacac gctgtatctg 300
caaatagaaca gcctgagagc cgaggacacg gccgtatatatt actgtgcgaa agaggcccat 360
cggggggccct ttgactactg gggccaggga accctgggtca ccgtctcctc agctagcacc 420
aaggggcccat cgggtcttccc cctggcgccc tgctccagga gcacctccga gagcacagcg 480
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacgggtgtc gtggaactca 540
ggcgctctga ccagcggcgt gcacaccttc ccagctgtcc tacagtcctc aggactctac 600
tccctcagca gcgtgggtgac cgtgccctcc agcaacttcg gcaccagac ctacacctgc 660
aacgtagatc acaagccag caacaccaag gtggacaaga cagttgagcg caaatgttgt 720
gtcgagtgcc caccgtgccc agcaccacct gtggcaggac cgtcagtctt cctcttcccc 780
ccaaaacca aggacaccct catgatctcc cggaccctg aggtcacgtg cgtggtggtg 840
gacgtgagcc acgaagacct cgagggtccag ttcaactggt acgtggacgg cgtggagggtg 900

A-2063-WO-PCT_SeqList_ST25-092817

cataatgccagacaaaagccacgggaggagcagttcaacagcacgttccgtgtggtcagc960
gtcctcaccgttgtgcaccegactggctgaacggcaaggagtacaagtgcaaggtctcc1020
aaciaaaggcc tcccagcccc catcgagaaa accatctcca aaaccaaagg gcagccccga1080
gaaccacagg tgtacaccct gccccatcc cgggaggaga tgaccaagaa ccaggtcagc1140
ctgacctgcc tgggtcaaagg cttctacccc agcgacatcg ccgtggagtggagagcaat1200
gggcagccgg agaacaacta caagaccaca cctcccatgc tggactccga cggctccttc1260
ttcctctaca gcaagctcac cgtggacaag agcaggtggc agcaggggaa cgtcttctca1320
tgctccgtga tgcattgaggc tctgcacaac cactacacgc agaagagcct ctccctgtct1380
ccgggtaaa1389

<210> 56
<211> 463
<212> PRT
<213> Homo sapiens

<400> 56

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

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

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

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

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

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

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

Tyr Tyr Cys Ala Lys Glu Ala His Arg Gly Pro Phe Asp Tyr Trp Gly
115 120 125

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
145 150 155 160

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val

165

170

175

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

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

Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His
210 215 220

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
245 250 255

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

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

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

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
305 310 315 320

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

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

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

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

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

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
405 410 415

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

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
Page 58

435

440

445

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

<210> 57
 <211> 721
 <212> DNA
 <213> Homo sapiens

<400> 57
 atgaggctcc ttgctcagct tctggggctg ctaatgctct gggtccttgg atccagtggg 60
 gatattgtga tgaccagac tccactctcc tcacctgtca cccttggaca gccggcctcc 120
 atctcctgca ggtctagtca aagcctcgta cacagtgatg gaaacaccta cttgagttgg 180
 cttcagcaga ggccaggcca gcctccaaga ctctaattt ataagaaatt taaccggttc 240
 tctggggctcc cagacagatt cagtggcagt ggggcaggga cagatttcac actgaaaatc 300
 agcaggggtg aagctgagga tgtcgggggt tattactgca tgcaagctac acaaattcct 360
 ctactttcg gccctgggac caaagtggat atcaaacgaa ctgtggctgc accatctgtc 420
 ttcatcttcc cgccatctga tgagcagttg aaatctggaa ctgcctctgt tgtgtgcctg 480
 ctgaataact tctatcccag agaggccaaa gtacagtgga aggtggataa cgccctccaa 540
 tcgggtaact cccaggagag tgtcacagag caggacagca aggacagcac ctacagcctc 600
 agcagcacc tgacgctgag caaagcagac tacgagaaac acaaagtcta cgcttgcgaa 660
 gtcacccatc agggcctgag ctcgcccgtc acaaagagct tcaacagggg agagtgttga 720
 g 721

<210> 58
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 58

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

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

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

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

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

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ala Gly Thr Asp Phe
 Page 59

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

Cys Met Gln Ala Thr Gln Ile Pro Leu Thr Phe Gly Pro Gly Thr Lys
115 120 125

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

Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
145 150 155 160

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

Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
180 185 190

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

Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
210 215 220

Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 59
<211> 1416
<212> DNA
<213> Homo sapiens

<400> 59
atggagtttg ggctgagctg ggttttcctc gttgctcttt taagaggtgt ccagtgtcag 60
gtgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc 120
tgtgcagcgt ctggattcac cttcagtttc tatggcatgc actgggtccg ccaggctcca 180
ggcaaggggc tggagtgggt ggcagttata tggtatgatg gaagtaataa atactatgca 240
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctg 300
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgcgag aggggggttat 360
gattacgttt gggggagtta tcgccgtaac tccgactttg actactgggg ccagggaacc 420
ctggtcaccg tctctagtgc ctccaccaag ggcccatcgg tcttccccct ggcgcctgc 480
tccaggagca cctccgagag cacagcggcc ctgggctgcc tgggtcaagga ctacttcccc 540
gaaccggtga cggtgtcgtg gaactcaggc gctctgacca gcggcgtgca caccttccca 600
gctgtcctac agtcctcagg actctactcc ctcagcagcg tggtgaccgt gccctccagc 660
aacttcggca cccagaccta cacctgcaac gtagatcaca agcccagcaa caccaagggtg 720

A-2063-WO-PCT_SeqList_ST25-092817

gacaagacag ttgagcgcaa atgttggtgtc gagggtccac cgtgcccagc accacctgtg 780
gcaggaccgt cagtcttctt cttcccccca aaaccaagg acacctcat gatctcccg 840
acccctgagg tcacgtgctt ggtggtggac gtgagccacg aagaccccga ggtccagttc 900
aactggtacg tggacggcgt ggaggtgcat aatgccaaga caaagccacg ggaggagcag 960
ttcaacagca cgttccgtgt ggtcagcgtc ctcaccgttg tgcaccagga ctggctgaac 1020
ggcaaggagt acaagtgcaa ggtctccaac aaaggcctcc cagcccccat cgagaaaacc 1080
atctccaaaa ccaaaggga gccccgagaa ccacaggtgt acacctgcc cccatcccg 1140
gaggagatga ccaagaacca ggtcagcctg acctgcctgg tcaaaggctt ctaccccagc 1200
gacatcgccg tggagtggga gagcaatggg cagccggaga acaactacaa gaccacacct 1260
cccatgctgg actccgacgg ctccttcttc ctctacagca agctcaccgt ggacaagagc 1320
aggtggcagc aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac 1380
tacacgcaga agagcctctc cctgtctccg ggtaaa 1416

<210> 60
<211> 472
<212> PRT
<213> Homo sapiens

<400> 60

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

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

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

Glu Trp Val Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Gly Gly Tyr Asp Tyr Val Trp Gly Ser Tyr Arg
115 120 125

Arg Asn Ser Asp Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
130 135 140

A-2063-WO-PCT_SeqList_ST25-092817

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

Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys
165 170 175

Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
180 185 190

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
195 200 205

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr
210 215 220

Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val
225 230 235 240

Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro
245 250 255

Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
260 265 270

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
275 280 285

Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val
290 295 300

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
305 310 315 320

Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln
325 330 335

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly
340 345 350

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro
355 360 365

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
370 375 380

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
385 390 395 400

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
405 410 415

A-2063-WO-PCT_SeqList_ST25-092817

Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
420 425 430

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
435 440 445

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
450 455 460

Ser Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 61
<211> 705
<212> DNA
<213> Homo sapiens

<400> 61
atggaagccc cagctcagct tctcttcctc ctgctactct ggctcccaga taccactgga 60
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 120
ctctcctgca gggccagtc gagtggtgac agcaacttag cctggtaccg gcagaaacct 180
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 240
aggttcagtg gcagtgggtc tgggactgag ttactctca ccatcagcag cctgcagtct 300
gaagattttg cagtttatta ctgtcagcag tatattaact ggcctccgat caccttcggc 360
caagggacac gactggagat taaacgaact gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 62
<211> 235
<212> PRT
<213> Homo sapiens

<400> 62
Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

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

Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
35 40 45

Val Asp Ser Asn Leu Ala Trp Tyr Arg Gln Lys Pro Gly Gln Ala Pro
Page 63

50

55

60

Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala
65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
85 90 95

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

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

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 63

<211> 1395

<212> DNA

<213> Homo sapiens

<400> 63

atgaaacacc tgtggttctt cttctcctg gtggcagctc ccagatgggt cctgtcccag 60

gtgcagctgc aggagtcggg cccaggactg gtgaagcctt cggagaccct gtccctcacc 120

tgactgtct ctggtggctc catcagtatt tactactgga gctggatccg gcagcccca 180

gggaagggac tggagtggat tgggtatgtc tattacagtg ggagcaccaa ttacaacccc 240

tccctcaaga gtcgagtcac catatcagta gacacgtcca agaaccagtt ctccctgaag 300

ctgaactctg tgaccgctgc ggacacggcc gtgtattact gtgcgagagg gggatacgat 360

ttttggagtg gttattttga ctactggggc caggaaccc tggtcaccgt ctctagtgcc 420

tccaccaagg gcccatcggg cttccccctg gcgccctgct ccaggagcac ctccgagagc 480

A-2063-WO-PCT_SeqList_ST25-092817

acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 540
aactcaggcg ctctgaccag cggcgtgcac accttccag ctgtcctaca gtcctcagga 600
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 660
acctgcaacg tagatcaciaa gcccagcaac accaaggtgg acaagacagt tgagcgcaaa 720
tgttgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 780
ttccccccaa aaccaagga caccctcatg atctcccga cccctgaggt cacgtgcgtg 840
gtggtggacg tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg 900
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 960
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgaag 1020
gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaagggcag 1080
ccccgagaac cacaggtgta caccctgccc ccatcccgagg aggagatgac caagaaccag 1140
gtcagcctga cctgcctggt caaaggcttc taccacagcg acatcgccgt ggagtgaggag 1200
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1260
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1320
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1380
ctgtctccgg gtaaa 1395

<210> 64
<211> 465
<212> PRT
<213> Homo sapiens

<400> 64

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

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

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

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Tyr Cys Ala Arg Gly Gly Tyr Asp Phe Trp Ser Gly Tyr Phe Asp Tyr
 115 120 125

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

 Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser
 145 150 155 160

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

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

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

 Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val
 210 215 220

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

 Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro
 245 250 255

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

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

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

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

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

Lys
465

<210> 65
<211> 723
<212> DNA
<213> Homo sapiens

<400> 65
atggtgctgc agaccaggt gtttattagc ctgctgctgt ggattagcgg cgcgtatggc 60
gacatcgtgc tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 120
atcaactgca agtccagcca gagtatttta tacagctcca gcaatgagaa cttcttaact 180
tggtaccagc agaaaccagg acagcctcct aagctgctca ttactgggc atctaccg 240
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 300
atcagcagcc tgcagcctga agatgtggca gtttattact gtcagcaata ttttagtggt 360
tttcggacgt tcggccaagg gaccaggggtg gaaatcaaac gtacggtggc tgcaccatct 420
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 480
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 540
caatcgggta actcccagga gagtgtcaca gacgaggaca gcaaggacag cacctacagc 600
ctcagcagca ccctgacgt gagcaaagca gactacgaga aacacaaagt ctacgcctgc 660
gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 720
tag 723

<210> 66
<211> 240
<212> PRT
<213> Homo sapiens

<400> 66

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

A-2063-WO-PCT_SeqList_ST25-092817

Gly Ala Tyr Gly Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala
20 25 30

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

Ile Leu Tyr Ser Ser Ser Asn Glu Asn Phe Leu Thr Trp Tyr Gln Gln
50 55 60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
65 70 75 80

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

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

Tyr Cys Gln Gln Tyr Phe Ser Val Phe Arg Thr Phe Gly Gln Gly Thr
115 120 125

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

Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys
145 150 155 160

Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
165 170 175

Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln
180 185 190

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

Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
210 215 220

Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235 240

<210> 67
<211> 1395
<212> DNA
<213> Homo sapiens

<400> 67
atggattgga cctggcgtat tctgtttctg gtggcggcgg cgaccggcgc gcatagccag 60
gtgcagctgg tgcagtctgg ggctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120
tgcaaggctt ctggatacac cttcaccggc tactatatac actgggtgcg acaggcccct 180

A-2063-WO-PCT_SeqList_ST25-092817

```

ggacaagggc ttgagtggat gggatggatc aaccctaaca gtggtggcac aaactctgca      240
cagaagtttc ggggcagggc caccatgacc agggacacgt ccatcagcac agcctacatg      300
gagctgagca ggctgagatc tgacgacacg gccgtgtatt actgtgcgcg agaggggtgga      360
tacagctatg gttactttga ctactggggc cagggaaacc tggtcaccgt ctctcagct      420
agcaccaagg gcccacggtt cttccccctg gcgccctgct ccaggagcac ctccgagagc      480
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg      540
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga      600
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac      660
acctgcaacg tagatcacia gccagcaac accaaggtgg acaagacagt tgagcgcaaa      720
tgttgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc      780
ttccccccaa aacccaagga caccctcatg atctcccga cccctgaggt cacgtgctgtg      840
gtggtggacg tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg      900
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg      960
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgaag     1020
gtctccaaca aaggcctccc agcccccatc gagaaaacca tctccaaaac caaagggcag     1080
ccccgagaac cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag     1140
gtcagcctga cctgcctggt caaaggcttc taccacgagc acatcgccgt ggagtgggag     1200
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc     1260
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc     1320
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc     1380
ctgtctccgg gtaaa                                           1395

```

<210> 68
 <211> 465
 <212> PRT
 <213> Homo sapiens

<400> 68

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

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

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

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

Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Ser Ala

340

345

350

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

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

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

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

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

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

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

Lys
 465

<210> 69
 <211> 708
 <212> DNA
 <213> Homo sapiens

<400> 69
 atggacatga ggggtccccgc tcagctcctg gggctcctgc tgctctgggt cccaggtgcc 60
 aggtgtgaca tccagatgac ccagtctcca tcctccctgt ctgcatctgt aggagacaga 120
 gtcacatca cttgccgggc aagtcagggc attagaaatg atttaggctg gtatcagcag 180
 aaaccagggg aagcccctaa ggcctgatc tatgctgcat ccagtttgca aagtgggggtc 240
 ccatcaagggt tcagcggcag tggatctggg acagaattca ctctcacaat cagcagtgtg 300
 cagcctgaag attttgtaac ttattactgt ctacagcata atagtaaccc tctcactttc 360
 ggcggaggga ccaaggtgga gatcaaacga actgtggctg caccatctgt cttcatcttc 420
 ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
 ttctatcca gagaggcaa agtacagtgg aaggtggata acgccctcca atcgggtaac 540
 tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
 ctgacgctga gcaaagcaga ctacagaaa cacaaagtct acgcctgcga agtcacccat 660
 cagggcctga gctcgcccgt cacaaagagc ttcaacaggg gagagtgt 708

<210> 70
 <211> 236

<212> PRT
 <213> Homo sapiens

<400> 70

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

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

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

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr
 85 90 95

Ile Ser Ser Val Gln Pro Glu Asp Phe Val Thr Tyr Tyr Cys Leu Gln
 100 105 110

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

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

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160

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

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

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

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 71
 <211> 1419
 <212> DNA

<213> Homo sapiens

<400> 71

```

atggagtttg ggctgagctg ggttttcctc gttgctcttt taagaggtgt ccagtgtcag      60
gtgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc      120
tgtgcagcgt ctggattcac cttcagtagc tatggcatgc actgggtccg ccaggctcca      180
ggcaaggggc tggagtgggt ggcagttatg tggatatgat gaagtaataa agactatgta      240
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctg      300
caaatgaacc gcctgagagc cgaggacacg gctgtgtatt actgtgctgag agaaaaagat      360
cattacgaca ttttgactgg ttataactac tactacggtc tggacgtctg gggccaaggg      420
accacggtca ccgtctcctc agcctccacc aaggggccat cggctcttccc cctggcgccc      480
tgctccagga gcacctcca gagcacagcg gccctgggct gcctgggtcaa ggactacttc      540
cccgaaccgg tgacggtgtc gtggaactca ggcgctctga ccagcggcgt gcacaccttc      600
ccagctgtcc tacagtcctc aggactctac tccctcagca gcgtgggtgac cgtgccctcc      660
agcaacttcg gcaccagac ctacacctgc aacgtagatc acaagcccag caacaccaag      720
gtggacaaga cagttgagcg caaatgttgt gtcgagtgcc caccgtgccc agcaccacct      780
gtggcaggac cgtcagtcct cctcttcccc caaaaccca aggacaccct catgatctcc      840
cggacccctg aggtcacgtg cgtgggtggtg gacgtgagcc acgaagacct cgaggtccag      900
ttcaactggt acgtggacgg cgtggaggtg cataatgcc aagacaaagcc acgggaggag      960
cagttcaaca gcacgttccg tgtggtcagc gtcctcaccg ttgtgcacca ggactggctg     1020
aacggcaagg agtacaagtg caaggtctcc aacaaaggcc tcccagcccc catcgagaaa     1080
accatctcca aaaccaaagg gcagccccga gaaccacagg tgtacacctt gccccatcc     1140
cgggaggaga tgaccaagaa ccaggtcagc ctgacctgcc tgggtcaaagg cttctacccc     1200
agcgacatcg ccgtggagtg ggagagcaat gggcagccgg agaacaacta caagaccaca     1260
cctcccatgc tggactccga cggctccttc ttcctctaca gcaagctcac cgtggacaag     1320
agcaggtggc agcaggggaa cgtcttctca tgctccgtga tgcattgaggc tctgcacaac     1380
cactacacgc agaagagcct ctccctgtct ccgggtaaa                        1419

```

<210> 72

<211> 473

<212> PRT

<213> Homo sapiens

<400> 72

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

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
Page 73

35

40

45

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

Glu Trp Val Ala Val Met Trp Tyr Asp Gly Ser Asn Lys Asp Tyr Val
 65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Glu Lys Asp His Tyr Asp Ile Leu Thr Gly Tyr
 115 120 125

Asn Tyr Tyr Tyr Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 130 135 140

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

Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
 165 170 175

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 180 185 190

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 195 200 205

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
 210 215 220

Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
 225 230 235 240

Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
 245 250 255

Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 260 265 270

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 275 280 285

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 290 295 300

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 Page 74

305 310 315 320

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
325 330 335

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
340 345 350

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
355 360 365

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
370 375 380

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
385 390 395 400

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
405 410 415

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
420 425 430

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
450 455 460

Lys Ser Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 73
<211> 705
<212> DNA
<213> Homo sapiens

<400> 73
atggaaaccc cggcgcagct gctgtttctg ctgctgctgt ggctgccgga taccaccggc 60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
ctctcctgca gggccagtca gtatattagc aacacctatt tagcctgggt ccagcagaaa 180
cctggccagg ctcccaggct cctcatctat ggtgcagcca ccagggccac tggcatccca 240
gacaggttca gtggcagtggt gtctgggaca gacttcactt tcaccatcag cagactggag 300
cctgaagatt ttgcagtgtt ttactgtcag cagtatggta gctcaccgtg gacgttcggc 360
caagggacca cgggtggaaat caaacgtacg gtggctgcac catctgtctt catcttccc 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcacctg 600

acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt cacccatcag 660
 ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 74
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 74

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
 1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
 20 25 30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Tyr
 35 40 45

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

Pro Arg Leu Leu Ile Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro
 65 70 75 80

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

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

Gly Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
 115 120 125

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

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

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 75
<211> 1389
<212> DNA
<213> Homo sapiens

<400> 75
atggattgga cctggcgtat tctgtttctg gtggcgggcg cgaccggcgc gcatagccag 60
gtgcagttgg tgcagtctgg ggctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120
tgcaaggctt ctggatacac cttcaccggc tactatatgc actgggtgcg acaggcccct 180
ggacaagggc ttgagtggat gggatggatc aaccctaaca gtggtggcac aaactatgca 240
cagaggtttc ggggcagggc caccatgacc agggacacgt ccatcagcac agcctacatg 300
gaactgagca ggctgagatc tgacgacacg gccgtgtatt actgtgagag agccccgtat 360
gactggacct ttgactactg gggccaggga accctgggtca cgtctcctc agctagcacc 420
aaggggccat cggctctccc cctggcgccc tgctccagga gcacctccga gagcacagcg 480
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacgggtgtc gtggaactca 540
ggcgctctga ccagcggcgt gcacaccttc ccagctgtcc tacagtcctc aggactctac 600
tccctcagca gcgtggtgac cgtgccctcc agcaacttcg gcaccagac ctacacctgc 660
aacgtagatc acaagcccag caacaccaag gtggacaaga cagttgagcg caaatgttgt 720
gtcgagtgcc caccgtgccc agcaccacct gtggcaggac cgtcagtcct cctcttcccc 780
ccaaaacca aggacaccct catgatctcc cggacccttg aggtcacgtg cgtggtggtg 840
gacgtgagcc acgaagacct cgaggtccag ttcaactggt acgtggacgg cgtggaggtg 900
cataatgcca agacaaagcc acgggaggag cagttcaaca gcacgttccg tgtggtcagc 960
gtcctcaccg ttgtgcacca ggactggctg aacggcaagg agtacaagtg caaggtctcc 1020
aacaaggcc tcccagcccc catcgagaaa accatctcca aaaccaaagg gcagccccga 1080
gaaccacagg tgtacacctt gccccatcc cgggaggaga tgaccaagaa ccaggtcagc 1140
ctgacctgcc tgggtcaaagg cttctacccc agcgacatcg ccgtggagtg ggagagcaat 1200
gggcagccgg agaacaacta caagaccaca cctcccatgc tggactccga cggctccttc 1260
ttcctctaca gcaagctcac cgtggacaag agcaggtggc agcaggggaa cgtcttctca 1320
tgctccgtga tgcattgagg tctgcacaac cactacacgc agaagagcct ctccctgtct 1380
ccgggtaaa 1389

<210> 76
<211> 463
<212> PRT
<213> Homo sapiens

<400> 76

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly

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

275

280

285

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

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
 305 310 315 320

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

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

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

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

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

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
 405 410 415

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

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 435 440 445

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

<210> 77
 <211> 708
 <212> DNA
 <213> Homo sapiens

<400> 77
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
 cgctgtgaca tccagatgac ccagtctcca tcttccgtgt ctgcatctgt aggagacaga 120
 gtcacatca cttgtcgggc gagtcagggt attagcaact ggtagcctg gtatcagcag 180
 aaaccagggg cagcccctaa actcctgatc tatgctgcat ccagtttgca aagtggggtc 240
 ccatcaaggt tcagcggcag tggatctggg acagatttca ctctcaccat cagcagcctg 300
 cagcctgaag attttgcaac ttactattgt caacaggcta acagtttccc attcactttc 360
 ggccctggga ccaaagtga tatcaaactg acggtggctg caccatctgt cttcatcttc 420
 ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480

A-2063-WO-PCT_SeqList_ST25-092817

ttctatccca gagaggccaa agtacagtgg aaggtggata acgccctcca atcgggtaac	540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc	600
ctgacgctga gcaaagcaga ctacagaaaa cacaaagtct acgcctgcga agtcacccat	660
cagggcctga gctcgcccggt cacaagagc ttcaacaggg gagagtgt	708

<210> 78
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 78

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

A-2063-WO-PCT_SeqList_ST25-092817

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 79
<211> 1407
<212> DNA
<213> Homo sapiens

<400> 79
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtcagg tgcagttggt gcagtctggg actgaggtga agaagcctgg ggcctcaatg 120
aaggtttcct gcaaggcatc tggatacacc ttcaccagct attatatgca ctgggtgcga 180
cagggcccctg gacaagggtc tgagtggatg ggaataatca accctagtgg tgatagcaca 240
agctacgcac agaagttcca gggcagagtc accatgacca gggacacgtc cacgaacaca 300
gtctacatgg agctgagcag cctgagatct gaggacacgg ccatgtatta ctgtgcgaga 360
gatgtagagg ttcggggaat ttctcacttt gactactggg gccaggggaac cctgggtcacc 420
gtctctagtg cctccaccaa gggcccatcg gtcttcccc tggcgccctg ctccaggagc 480
acctccgaga gcacagcggc cctgggctgc ctggtcaagg actacttccc cgaaccggtg 540
acggtgtcgt ggaactcagg cgctctgacc agcggcgtgc acaccttccc agctgtccta 600
cagtcctcag gactctactc cctcagcagc gtggtgaccg tgccctccag caacttcggc 660
acctcagacct acacctgcaa cgtagatcac aagcccagca acaccaaggt ggacaagaca 720
gttgagcgca aatgtttgtg cgagtgccca ccgtgcccag caccacctgt ggcaggaccg 780
tcagtcttcc tcttcccccc aaaaccaag gacacctca tgatctccc gacctctgag 840
gtcacgtgcg tgggtggtgga cgtgagccac gaagacccc aggtccagtt caactggtac 900
gtggacggcg tggaggtgca taatgccaa acaaagccac gggaggagca gttcaacagc 960
acgttccgtg tggtcagcgt cctcaccgtt gtgcaccagg actggctgaa cggcaaggag 1020
tacaagtgca aggtctccaa caaaggcctc ccagccccca tcgagaaaac catctccaaa 1080
accaaagggc agccccgaga accacaggtg tacaccctgc ccccatccc ggaggagatg 1140
accaagaacc aggtcagcct gacctgcctg gtcaaaggct tctaccccag cgacatcgcc 1200
gtggagtggg agagcaatgg gcagccggag aacaactaca agaccacacc tcccatgctg 1260
gactccgacg gtccttctt cctctacagc aagctcaccg tggacaagag caggtggcag 1320
caggggaacg tcttctcatg ctccgtgatg catgaggctc tgcacaacca ctacacgcag 1380
aagagcctct ccctgtctcc gggtaaa 1407

<210> 80
<211> 469
<212> PRT
<213> Homo sapiens

<400> 80

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

Val Lys Lys Pro Gly Ala Ser Met Lys Val Ser Cys Lys Ala Ser Gly
 35 40 45

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

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

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

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

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

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

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

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

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

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu
 195 200 205

Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr
 210 215 220

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

Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro
 245 250 255

Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 Page 82

260

265

270

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 275 280 285

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

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
 305 310 315 320

Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp Leu
 325 330 335

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

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

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

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

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

Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 420 425 430

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
 435 440 445

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

Leu Ser Pro Gly Lys
 465

<210> 81
 <211> 714
 <212> DNA
 <213> Homo sapiens

<400> 81
 atgggatgga gctgtatcat cctcttcttg gtagcaacag ctacaggtgt ccactccgac 60
 atccagctga cccagtctcc atcatctctg agcgcacatctg ttggagatag ggctcactatg 120
 agctgtaagt ccagtcaaag tgttttatac agtgcaaadc acaagaacta cttggcctgg 180
 taccagcaga aaccagggaa agcacctaaa ctgctgatct actgggcac cactagggaa 240

A-2063-WO-PCT_SeqList_ST25-092817

tctggtgtcc cttcgcgatt ctctggcagc ggatctggga cagattttac tttcaccatc	300
agctctcttc aaccagaaga cattgcaaca tattattgtc accaatacct ctctctgtgg	360
acgttcggtg gagggaccaa ggtgcagatc aaacgaactg tggctgcacc atctgtcttc	420
atcttcccg ccatctgatga gcagttgaaa tctggaactg cctctgttgt gtgcctgctg	480
aataacttct atcccagaga ggccaaagta cagtgggaagg tggataacgc cctccaatcg	540
ggtaactccc aggagagtgt cacagagcag gacagcaagg acagcaccta cagcctcagc	600
agcaccctga cgctgagcaa agcagactac gagaaacaca aagtctacgc ctgcgaagtc	660
acccatcagg gcctgagctc gcccgtcaca aagagcttca acaggggaga gtgt	714

<210> 82
 <211> 238
 <212> PRT
 <213> Homo sapiens

<400> 82

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

Val His Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala
 20 25 30

Ser Val Gly Asp Arg Val Thr Met Ser Cys Lys Ser Ser Gln Ser Val
 35 40 45

Leu Tyr Ser Ala Asn His Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys
 50 55 60

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

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

Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr
 100 105 110

Cys His Gln Tyr Leu Ser Ser Trp Thr Phe Gly Gly Gly Thr Lys Val
 115 120 125

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

Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
 145 150 155 160

Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
 165 170 175

A-2063-WO-PCT_SeqList_ST25-092817

Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
180 185 190

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

Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
210 215 220

Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 83
<211> 1395
<212> DNA
<213> Homo sapiens

<400> 83
atgggatgga gctgtatcat cctcttcttg gtagcaacag ctacaggtgt ccaactcccag 60
gtccagctgg tccaatcagg ggctgaagtc aagaaacctg ggcatcagtg gaaggtctcc 120
tgcaaggctt ctggctacac ctttactagc tactggctgc actgggtcag gcaggcacct 180
ggacaggggtc tggaatggat tggatacatt aatcctagga atgattatac tgagtacaat 240
cagaacttca aggacaaggc cacaataact gcagacgaat ccaccaatac agcctacatg 300
gagctgagca gcctgaggtc tgaggacacg gcatttttatt tttgtgcaag aagggatatt 360
actacgttct actggggcca aggcaccacg gtcaccgtct cctcagcctc caccaagggc 420
ccatcggtct tccccctggc accctcctcc aagagcacct ctgggggcac agcggccctg 480
ggctgcctgg tcaaggacta cttccccgaa ccggtgacgg tgtcgtggaa ctcaggcgcc 540
ctgaccagcg gcgtgcacac cttcccggct gtcctacagt cctcaggact ctactccctc 600
agcagcgtgg tgaccgtgcc ctccagcagc ttgggcaccc agacctacat ctgcaacgtg 660
aatcacaagc ccagcaacac caaggtggac aagagagttg agcccaaatac ttgtgacaaa 720
actcacacat gcccaccgtg cccagcacct gaactcctgg ggggaccgtc agtcttcctc 780
ttccccccaa aaccaagga caccctcatg atctcccga cccctgaggt cacatgcgtg 840
gtggtggacg tgagccacga agaccctgag gtcaagttca actggtacgt ggacggcgtg 900
gaggtgcata atgccaagac aaagccgcgg gaggagcagt acaacagcac gtaccgtgtg 960
gtcagcgtcc tcaccgtcct gcaccaggac tggctgaatg gcaaggagta caagtgaag 1020
gtctccaaca aagccctccc agccccatc gagaaaacca tctccaaagc caaagggcag 1080
ccccgagaac cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag 1140
gtcagcctga cctgcctggt caaaggcttc tatcccagcg acatcgccgt ggagtgggag 1200
agcaatgggc agccggagaa caactacaag accacgcctc ccgtgctgga ctccgacggc 1260
tccttcttcc tctatagcaa gtcaccgtg gacaagagca ggtggcagca ggggaacgtc 1320
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1380

ctgtctccgg gtaaa

1395

<210> 84
 <211> 465
 <212> PRT
 <213> Homo sapiens

<400> 84

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

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

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

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

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

Gln Asn Phe Lys Asp Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Asn
 85 90 95

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

Tyr Phe Cys Ala Arg Arg Asp Ile Thr Thr Phe Tyr Trp Gly Gln Gly
 115 120 125

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

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

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

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

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

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

Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys

225 230 235 240

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Lys
465

<210>	85
<211>	705
<212>	DNA
<213>	Homo sapiens

A-2063-WO-PCT_SeqList_ST25-092817

<400> 85
atggaaaccc cagctcagct tctcttcctc ctgctactct ggctcccaga taccaccgga 60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
ctctcctgca gggccagtca gagtgtttagc agcagctact tagcctggta ccagcagaaa 180
cctggccagg ctcccaggct cctcatatat ggtgcatcca gcagggccac tggcatccca 240
gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 300
cctgaagatt ttgcagtgtg ttactgtcag cggctctggtg gctcatcatt cactttcggc 360
cctgggacca aagtggatat caaacgaact gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 86
<211> 235
<212> PRT
<213> Homo sapiens

<400> 86

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 87
<211> 1398
<212> DNA
<213> Homo sapiens

<400> 87
atgggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt ctgtgccgag 60
gtgcagctgg tacagtctgg agcagaggtg aaaaagcccc gggagtctct gaagatctcc 120
tgtaaggggt ctggatacaa ctttaccagc tactggatcg gctgggtgcg ccagatgccc 180
gggaaaggcc tggagttgat ggggatcatc tatcctggtg actctgatac cagatacagc 240
ccgtccttcc aaggccaggt caccatctca gccgacaagt ccatcagcac cgcctacctg 300
cagtggagca gcctgaaggc ctcggacacc gccatgtatt actgtggttc ggggagctac 360
ttttacttcg atctctgggg ccgtggcacc ctggtcaccg tctctagtgc ctccaccaag 420
ggcccatcgg tcttccccct ggcaccctcc tccaagagca cctctggggg cacagcggcc 480
ctgggctgcc tgggtcaagga ctacttcccc gaaccggtga cgggtgctgt gaactcaggc 540
gccctgacca gcggcgtgca caccttcccc gctgtcctac agtcctcagg actctactcc 600
ctcagcagcg tggtgaccgt gccctccagc agcttgggca ccagaccta catctgcaac 660
gtgaatcaca agcccagcaa caccaaggtg gacaagaaag ttgagcccaa atcttgtgac 720
aaaactcaca catgcccacc gtgcccagca cctgaactcc tgggggggacc gtcagtcttc 780
ctcttcccc caaaaccaa ggacaccctc atgatctccc ggaccctga ggtcacatgc 840
gtggtggtgg acgtgagcca cgaagaccct gaggtcaagt tcaactggtg cgtggacggc 900
gtggaggtgc ataatgcaa gacaaagccg cgggaggagc agtacaacag cacgtaccgt 960
gtggtcagcg tcctcaccgt cctgcaccag gactggctga atggcaagga gtacaagtgc 1020
aaggctctca acaaagccct ccagcccc atcgagaaaa ccatctcaa agccaaaggg 1080
cagccccgag aaccacaggt gtacaccctg ccccatccc gggatgagct gaccaagaac 1140

A-2063-WO-PCT_SeqList_ST25-092817

caggtcagcc tgacctgcct ggtcaaaggc ttctatccca gcgacatcgc cgtggagtgg 1200
gagagcaatg ggcagccgga gaacaactac aagaccacgc ctcccgtgct ggactccgac 1260
ggctccttct tcctctatag caagctcacc gtggacaaga gcaggtggca gcaggggaac 1320
gtcttctcat gctccgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc 1380
tccctgtctc cgggtaaa 1398

<210> 88
<211> 466
<212> PRT
<213> Homo sapiens

<400> 88

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

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

Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Asn Phe
35 40 45

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

Glu Leu Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser
65 70 75 80

Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser
85 90 95

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

Tyr Tyr Cys Gly Ser Gly Ser Tyr Phe Tyr Phe Asp Leu Trp Gly Arg
115 120 125

Gly Thr Leu 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> 89
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 89
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
 cgctgtgata ttgtgatgac tcagtctcca ctctccctgc ccgtcacccc tggagagccg 120
 gcctccatct cctgcaggtc tagtcagagc ctctgcata gtcattgata caactatttg 180
 gatttggtacc tgcagaagcc agggcagttc ccacagctcc tgatctatatt gggtttctaat 240
 cgggcctccg ggggtccctga caggttcagt ggcagtggat caggcacaga ttttacactg 300
 aaaatcagca gagtggaggc tgaggatgtt ggggtttatt actgcatgca aggtacacac 360
 tggcctccga cttttggcca ggggaccaag ctggagatca aacgtacggg ggctgcacca 420
 tctgtcttca tcttcccgcc atctgatgag cagttgaaat ctggaactgc ctctgtttgtg 480
 tgcctgctga ataacttcta tcccagagag gccaaagtac agtggaaggt ggataacgcc 540
 ctccaatcgg gtaactccca ggagagtgtc acagagcagg acagcaagga cagcacctac 600
 agcctcagca gcaccctgac gctgagcaaa gcagactacg agaaacacaa agtctacgcc 660
 tgcgaagtca cccatcaggg cctgagctcg cccgtcacia agagcttcaa caggggagag 720
 tgt 723

<210> 90
 <211> 241
 <212> PRT
 <213> Homo sapiens

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

100

105

110

Tyr Tyr Cys Met Gln Gly Thr His Trp Pro Pro Thr Phe Gly Gln Gly
 115 120 125

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

Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val
 145 150 155 160

Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
 165 170 175

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
 180 185 190

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
 195 200 205

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr
 210 215 220

His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu
 225 230 235 240

Cys

<210> 91
 <211> 1410
 <212> DNA
 <213> Homo sapiens

<400> 91
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
 cgctgtgagg tccagctggt gcagtctggg ggaggcgtgg tccagcctgg gaggtccctg 120
 agactctcct gtgcagcgtc tggattcacc ttcagtagct atggcatgca ctgggtccgc 180
 caggctccag gcaaggggct ggagtgggtt tcatacatta gtagtagtgg tagtaccata 240
 tactacgcag actctgtgaa gggccgattc accatctcca gggacaacgc caagaactca 300
 ctatatctgc aaatgaacag cctgagagcc gaggacacgg ccgtgtatta ctgtgcgaga 360
 gatctgttag attacgatct gttgactggt tatggctact ggggccaggg aaccctggctc 420
 accgtctcta gtgcctccac caagggccca tcggtcttcc ccctggcgcc ctgctccagg 480
 agcacctccg agagcacagc ggccctgggc tgcctggtca aggactactt ccccgaaccg 540
 gtgacggtgt cgtggaactc aggcgctctg accagcggcg tgcacacctt cccagctgtc 600
 ctacagtcct caggactcta ctccctcagc agcgtggtga ccgtgccctc cagcaacttc 660
 ggcacccaga cctacacctg caacgtagat cacaagccca gcaacaccaa ggtggacaag 720

A-2063-WO-PCT_SeqList_ST25-092817

```

acagttgagc gcaaattgttg tgtcagatgc ccaccgtgcc cagcaccacc tgtggcagga      780
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccctt      840
gaggtcacgt gcgtgggtgtt ggacgtgagc cacgaagacc ccgaggtcca gttcaactgg      900
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cacgggagga gcagttcaac      960
agcacgttcc gtgtgggtcag cgtcctcacc gttgtgcacc aggactggct gaacggcaag     1020
gagtacaagt gcaaggtctc caacaaaggc ctcccagccc ccatcgagaa aaccatctcc     1080
aaaaccaaag ggagcccccg agaaccacag gtgtacaccc tgccccatc ccgggaggag     1140
atgaccaaga accaggtcag cctgacctgc ctgggtcaaag gcttctaccc cagcgacatc     1200
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac acctcccatg     1260
ctggactccg acggctcctt cttcctctac agcaagctca ccgtggacaa gagcaggtgg     1320
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg     1380
cagaagagcc tctccctgtc tccgggtaaa      1410

```

<210> 92
 <211> 470
 <212> PRT
 <213> Homo sapiens

<400> 92

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 35 40 45

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

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

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

Ala Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 100 105 110

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

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
195 200 205

Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr
210 215 220

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

Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro
245 250 255

Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
260 265 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
275 280 285

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

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn
305 310 315 320

Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp
325 330 335

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

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
420 425 430

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
435 440 445

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

Ser Leu Ser Pro Gly Lys
465 470

<210> 93
<211> 705
<212> DNA
<213> Homo sapiens

<400> 93
atggaaaccc cagcgcagct tctcttcctc ctgctactct ggctcccaga taccaccgga 60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
ctctcctgca gggccagtca ggggtattagt agaagctact tagcctggta ccagcagaaa 180
cctggccagg ctcccagcct cctcatctat ggtgcatcca gcagggccac tggcatccca 240
gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 300
cctgaagatt ttgcagtgtt ttactgtcaa caatttggtg gttcaccgtg gacgttcggc 360
caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gctagcgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 94
<211> 235
<212> PRT
<213> Homo sapiens

<400> 94
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Gly
35 40 45

Ile Ser Arg Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
Page 96

50

55

60

Pro Ser Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro
65 70 75 80

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

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

Gly Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
115 120 125

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 95

<211> 1413

<212> DNA

<213> Homo sapiens

<400> 95

atgaagcatc tgtggttctt cctcctgctg gtggcagctc ccagatgggt cctgtcccag 60

gtgcagctgc aggagtcggg cccaggactg gtgaagcctt cacagaccct gtccctcacc 120

tgactgtct ctggtggctc catcagcagt ggtgattact tctggagctg gatccgccag 180

ctcccaggga agggcctgga gtggattggg cacatccata acagtgggac cacctactac 240

aatccgtccc tcaagagtcg agttaccata tcahtagaca cgtctaagaa gcagttctcc 300

ctgaggctga gttctgtgac tgccgcggac acggccgtat attactgtgc gagagatcga 360

gggggtgact actactatgg tatggacgtc tggggccaag ggaccacggt caccgtctcc 420

tcagcctcca ccaagggccc atccgtcttc ccctggcac cctcctccaa gagcacctct 480

A-2063-WO-PCT_SeqList_ST25-092817

```

gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg      540
tcgtggaact caggcgccct gaccagcggc gtgcacacct tcccggtgtg cctacagtcc      600
tcaggactct actccctcag cagcgtgggtg accgtgccct ccagcagctt gggcacccag      660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gagagttgag      720
cccaaattctt gtgacaaaac tcacacatgc ccaccgtgcc cagcacctga actcctgggg      780
ggaccgtcag tcttcctctt cccccaaaaa cccaaggaca ccctcatgat ctcccggacc      840
cctgagggtca catgctggtt ggtggacgtg agccacgaag accctgaggt caagttcaac      900
tggtacgtgg acggcgtgga ggtgcataat gccaaagaaa agccgcggga ggagcagtag      960
aacagcacgt accgtgtggt cagcgtcctc accgtcctgc accaggactg gctgaatggc     1020
aaggagtaca agtgcaaggt ctccaacaaa gccctcccag ccccatcga gaaaaccatc     1080
tccaaagcca aagggcagcc ccgagaacca caggtgtaca ccctgcccc atcccgggag     1140
gagatgacca agaaccaggt cagcctgacc tgcctggtca aaggcttcta tcccagcgac     1200
atcgccgtgg agtgggagag caatgggcag ccggagaaca actacaagac cagcctccc     1260
gtgctggact ccgacggctc cttcttcctc tatagcaagc tcaccgtgga caagagcagg     1320
tggcagcagg ggaacgtctt ctcattgctc gtgatgcatg aggtcttgca caaccactac     1380
acgcagaaga gcctctccct gtctccgggt aaa                                  1413

```

<210> 96
 <211> 471
 <212> PRT
 <213> Homo sapiens

<400> 96

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

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

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

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

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

Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys
 85 90 95

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

A-2063-WO-PCT_SeqList_ST25-092817

Val Tyr Tyr Cys Ala Arg Asp Arg Gly Gly Asp Tyr Tyr Tyr Gly Met
115 120 125

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

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

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

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

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

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
210 215 220

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

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
245 250 255

Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
275 280 285

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

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
325 330 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
340 345 350

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

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
370 375 380

A-2063-WO-PCT_SeqList_ST25-092817

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
385 390 395 400

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
405 410 415

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

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
450 455 460

Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 97
<211> 708
<212> DNA
<213> Homo sapiens

<400> 97
atggacatga gggtcctgc tcagctcctg gggctcctgc tgctctggct ctcaggtgcc 60
agatgtgaca tccagatgac ccagtctcca tcctccctgt ctgcatctgt aggagacaga 120
gtcaccatca cttgccaggc gagtcaggac atcagcaact atttaaattg gtatcagcag 180
aaaccaggga aagcccctaa actcctgatc tacgatgcat ccaatttgga aacaggggtc 240
ccatcaaggt tcagtggaag tggatctggg acagatttta ctttcaccat cagcagcctg 300
cagcctgaag atattgcaac atatttctgt caacactttg atcatctccc gctcgctttc 360
ggcggaggga ccaaggtgga gatcaaacga actgtggctg caccatctgt cttcatcttc 420
ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
ttctatccca gagaggccaa agtacagtgg aagggtggata acgccctcca atcgggtaac 540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
ctgacgctga gcaaagcaga ctacagaaa cacaaagtct acgcctgcga agtcacccat 660
cagggcctga gctcgcccg tcaaaagagc ttcaacaggg gagagtgt 708

<210> 98
<211> 236
<212> PRT
<213> Homo sapiens

<400> 98

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

Leu Ser Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
Page 100

20

25

30

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

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

Ala Pro Lys Leu Leu Ile Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val
 65 70 75 80

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

Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Phe Cys Gln His
 100 105 110

Phe Asp His Leu Pro Leu Ala Phe Gly Gly Gly Thr Lys Val Glu Ile
 115 120 125

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

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160

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

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

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

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 99
 <211> 1392
 <212> DNA
 <213> Homo sapiens

<400> 99
 atgaaacacc tgtggttctt cctcctcctg gtggcagctc ccagatgggt cctgtcccag 60
 gtacagctgc aggagtcggg cccaggactg gtgaagcctt cggagaccct gtccctcacc 120
 tgcactgtct ctggtggctc cgtcagcagt ggtgattact actggacctg gatccggcag 180
 tccccagggg agggactgga gtggattgga cacatctatt acagtgggaa caccaattat 240

A-2063-WO-PCT_SeqList_ST25-092817

```

aaccctccc tcaagagtcg actcaccata tcaattgaca cgtccaagac tcagttctcc      300
ctgaagctga gttctgtgac cgctgcggaac acggccattt attactgtgt gcgagatcga      360
gtgactgggtg cttttgatat ctgggggcaa gggacaatgg tcaccgtctc ttcagctagc      420
accaagggcc catcgggtctt cccctggcg ccctgtcca ggagcacctc cgagagcaca      480
gcggccctgg gctgcctggt caaggactac ttccccgaac cggtgacggt gtcgtggaac      540
tcaggcgctc tgaccagcgg cgtgcacacc ttcccagctg tcctacagtc ctcaggactc      600
tactccctca gcagcgtggt gaccgtgccc tccagcaact tcggcaccca gacctacacc      660
tgcaacgtag atcacaagcc cagcaacacc aagggtggaca agacagttga gcgcaaagt      720
tgtgtcgagt gccaccgtg cccagcacca cctgtggcag gaccgtcagt cttcctcttc      780
ccccaaaac ccaaggacac cctcatgatc tcccggacct ctgaggtcac gtgcgtgggtg      840
gtggacgtga gccacgaaga ccccgaggtc cagttcaact ggtacgtgga cggcgtggag      900
gtgcataatg ccaagacaaa gccacgggag gagcagttca acagcacggt cctgtgggtc      960
agcgtcctca ccgttgtgca ccaggactgg ctgaacggca aggagtacaa gtgcaaggtc     1020
tccaacaaag gcctcccagc ccccatcgag aaaaccatct ccaaaaccaa agggcagccc     1080
cgagaaccac aggtgtacac cctgccccca tcccgggagg agatgaccaa gaaccaggtc     1140
agcctgacct gcctgggtcaa aggcttctac cccagcgaca tcgccgtgga gtgggagagc     1200
aatgggcagc cggagaacaa ctacaagacc acacctcca tgctggactc cgacggctcc     1260
ttcttcctct acagcaagct caccgtggac aagagcaggt ggcagcaggg gaacgtcttc     1320
tcatgtccg tgatgcatga ggctctgcac aaccactaca cgcagaagag cctctccctg     1380
tctccgggta aa                                                                1392

```

```

<210> 100
<211> 464
<212> PRT
<213> Homo sapiens
<400> 100

```

```

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

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

Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val
          35          40          45

Ser Ser Gly Asp Tyr Tyr Trp Thr Trp Ile Arg Gln Ser Pro Gly Lys
          50          55          60

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

```

A-2063-WO-PCT_SeqList_ST25-092817

Asn Pro Ser Leu Lys₈₅ Ser Arg Leu Thr Ile₉₀ Ser Ile Asp Thr Ser₉₅ Lys

Thr Gln Phe Ser₁₀₀ Leu Lys Leu Ser Ser₁₀₅ Val Thr Ala Ala Asp₁₁₀ Thr Ala

Ile Tyr Tyr₁₁₅ Cys Val Arg Asp Arg₁₂₀ Val Thr Gly Ala Phe₁₂₅ Asp Ile Trp

Gly Gln Gly Thr Met Val Thr₁₃₅ Val Ser Ser Ala Ser₁₄₀ Thr Lys Gly Pro

Ser₁₄₅ Val Phe Pro Leu Ala₁₅₀ Pro Cys Ser Arg Ser₁₅₅ Thr Ser Glu Ser₁₆₀ Thr

Ala Ala Leu Gly Cys₁₆₅ Leu Val Lys Asp Tyr₁₇₀ Phe Pro Glu Pro Val₁₇₅ Thr

Val Ser Trp Asn₁₈₀ Ser Gly Ala Leu Thr₁₈₅ Ser Gly Val His Thr₁₉₀ Phe Pro

Ala Val Leu₁₉₅ Gln Ser Ser Gly Leu₂₀₀ Tyr Ser Leu Ser Ser₂₀₅ Val Val Thr

Val Pro₂₁₀ Ser Ser Asn Phe Gly₂₁₅ Thr Gln Thr Tyr Thr₂₂₀ Cys Asn Val Asp

His₂₂₅ Lys Pro Ser Asn Thr₂₃₀ Lys Val Asp Lys Thr₂₃₅ Val Glu Arg Lys Cys₂₄₀

Cys Val Glu Cys Pro₂₄₅ Pro Cys Pro Ala Pro₂₅₀ Pro Val Ala Gly Pro₂₅₅ Ser

Val Phe Leu Phe₂₆₀ Pro Pro Lys Pro Lys₂₆₅ Asp Thr Leu Met Ile₂₇₀ Ser Arg

Thr Pro Glu₂₇₅ Val Thr Cys Val Val₂₈₀ Val Asp Val Ser His₂₈₅ Glu Asp Pro

Glu Val₂₉₀ Gln Phe Asn Trp Tyr₂₉₅ Val Asp Gly Val Glu₃₀₀ Val His Asn Ala

Lys₃₀₅ Thr Lys Pro Arg Glu₃₁₀ Glu Gln Phe Asn Ser₃₁₅ Thr Phe Arg Val Val₃₂₀

Ser Val Leu Thr Val₃₂₅ Val His Gln Asp Trp₃₃₀ Leu Asn Gly Lys Glu₃₃₅ Tyr

Lys Cys Lys Val₃₄₀ Ser Asn Lys Gly Leu₃₄₅ Pro Ala Pro Ile Glu₃₅₀ Lys Thr

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp
405 410 415

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

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

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

<210> 101
<211> 708
<212> DNA
<213> Homo sapiens

<400> 101
atggaaaccc cagcgcagct tctcttcctc ctgctactct ggctcccaga taccgctagc 60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
ctctcctgca gggccagtc gagtgtagc aacagctact tagcctggta ccagcagaaa 180
cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggcccc tggcatccca 240
gacaggttca gtggcagtggt gtctgggaca gacttcactc tcaccatcag cagactggag 300
cctgaagatt ttgcagtgtt ttactgtcag cagtatgatc actcagcagg gtggacgttc 360
ggccaagggga ccaaggtgga gatcaaactg acggtggctg caccatctgt cttcatcttc 420
ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
ttctatccca gagaggccaa agtacagtgg aagggtgata acgccctcca atcgggtaac 540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
ctgacgctga gcaaagcaga ctacagagaa cacaaagtct acgcctgcga agtcacccat 660
cagggcctga gctcgcccggt cacaaagagc ttcaacaggg gagagtgt 708

<210> 102
<211> 236
<212> PRT
<213> Homo sapiens

<400> 102
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro

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

<210> 103
 <211> 1680
 <212> DNA
 <213> Homo sapiens

<400> 103
 atggggtcaa ccgcatcct tggcctcctc ctggctgttc tccaaggagt cgctagcgag 60
 gttcagctgg tggagtctgg gggaggcttg gtacagcctg gggggtccct gagactctcc 120
 Page 105

A-2063-WO-PCT_SeqList_ST25-092817

tgtgcagcct	ctggattcac	cttcagtaga	aatgctatgt	tctgggttcg	ccaggctcca	180
ggaaaaggtc	tggagtgggt	atcaggtatt	ggtactgggtg	gtgccacaag	ctatgcagac	240
tccgtgaagg	gccgattcac	catctccaga	gacaatgcc	agaactcctt	gtatcttcaa	300
atgaacagcc	tgagagccga	ggacacggct	gtgtattact	gtgcaagagg	gaggtactac	360
ttcccgtggg	ggggccagg	aaccctgggtc	accgtctcct	cagcctccac	caagggccca	420
tcggtcttcc	ccctggcgcc	ctgctccagg	agcacctccg	agagcacagc	ggccctgggc	480
tgcctgggtca	aggactactt	ccccgaaccg	gtgacgggtg	cgtggaactc	aggcgctctg	540
accagcggcg	tgcacacctt	cccggctgtc	ctacagtcct	caggactcta	ctccctcagc	600
agcgtgggtga	ccgtgccctc	cagcaacttc	ggcaccacaga	cctacacctg	caacgtagat	660
cacaagccca	gcaacaccaa	ggtggacaag	acagttgggtg	agaggccagc	tcaggaggagg	720
agggtgtctg	ctggaagcca	ggctcagccc	tcctgcctgg	acgcaccccg	gctgtgcagc	780
cccagcccag	ggcagcaagg	caggcccat	ctgtctcctc	acccggaggc	ctctgcccgc	840
cccactcatg	ctcagggaga	gggtcttctg	gctttttcca	ccaggctcca	ggcaggcaca	900
ggctgggtgc	ccctacccca	ggcccttcac	acacaggggc	agggtgcttg	ctcagacctg	960
ccaaaagcca	tatccgggag	gaccctgccc	ctgaccgagc	gcaaagtgtg	tgtcgagtgc	1020
ccaccgtgcc	cagcaccacc	tgtggcagga	ccgtcagtct	tcctcttccc	ccaaaaccc	1080
aaggacaccc	tcatgatctc	ccggaccct	gaggtcacgt	gcgtgggtgg	ggacgtgagc	1140
cacgaagacc	ccgaggtcca	gttcaactgg	tacgtggacg	gcgtggaggt	gcataatgcc	1200
aagacaaagc	cacgggagga	gcagttcaac	agcacgttcc	gtgtgggtcag	cgctctcacc	1260
gtcgtgcacc	aggactgggt	gaacggcaag	gagtacaagt	gcaagggtctc	caacaaaggc	1320
ctcccagccc	ccatcgagaa	aaccatctcc	aaaaccaaag	ggcagccccc	agaaccacag	1380
gtgtacaccc	tgccccatc	ccgggaggag	atgaccaaga	accagggtcag	cctgacctgc	1440
ctgggtcaaag	gcttctaccc	cagcgacatc	gccgtggagt	gggagagcaa	tgggcagccg	1500
gagaacaact	acaagaccac	acctcccatg	ctggactccg	acggctcctt	cttcctctac	1560
agcaagctca	ccgtggacaa	gagcaggtgg	cagcagggga	acgtcttctc	atgctccgtg	1620
atgcatgagg	ctctgcacaa	ccactacacg	cagaagagcc	tctccctgtc	tccgggtaaa	1680

<210> 104
 <211> 460
 <212> PRT
 <213> Homo sapiens

<400> 104

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Arg Asn Ala Met Phe Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

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

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

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

Tyr Cys Ala Arg Gly Arg Tyr Tyr Phe Pro Trp Trp Gly Gln Gly Thr
115 120 125

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

Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly
145 150 155 160

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

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

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

Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser
210 215 220

Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys
225 230 235 240

Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe
245 250 255

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

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe
275 280 285

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

A-2063-WO-PCT_SeqList_ST25-092817

Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr
305 310 315 320

Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
325 330 335

Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr
340 345 350

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

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
370 375 380

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
385 390 395 400

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser
405 410 415

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
420 425 430

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
435 440 445

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
450 455 460

<210> 105
<211> 702
<212> DNA
<213> Homo sapiens

<400> 105	
atggaacc cagcgcagct tctcttctc ctgctactct ggctcccaga taccaccgga	60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc	120
ctctcctgca gggccagtca gagtgttagc agcagctact tagcctggta ccagcagaaa	180
cctggccagg ctcccaggct cctcatctat ggtgcatccc gcagggccac tggcatccca	240
gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag	300
cctgaagatt ttgcagtgtt ttactgtcag cggtatggta gctcacacac ttttggccag	360
gggaccaagc tggagatcag ccgaactgtg gctgcacat ctgtcttcat cttcccacca	420
tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat	480
cccagagagg ccaaagtaca gtggaagggtg gataacgccc tccaatcggg taactcccag	540
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg	600
ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc	660

ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gt

702

<210> 106
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 106

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro
 1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
 20 25 30

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
 35 40 45

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
 50 55 60

Pro Arg Leu Leu Ile Tyr Gly Ala Ser Arg Arg Ala Thr Gly Ile Pro
 65 70 75 80

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

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

Gly Ser Ser His Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Ser 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> 107
 <211> 1401
 <212> DNA
 <213> Homo sapiens

<400> 107
 atgggggtcaa ccgccatcct cgccctcctc ctggctgttc tccaaggagt ctgtgccgag 60
 gtgcagctgg tgcagtctgg agcagaggtg aaaaagcccc gggagtctct gaagatctcc 120
 tgtaagggtt ctggatactt ctttaccacc tactggatcg gctgggtgcg ccagatgccc 180
 gggaaaggcc tggagtatat ggggatcatc tatcctgggtg actctgatac cagatacagc 240
 ccgtccttcc aaggccaggt caccatctca gccgacaagt ccatcagcac cgcctacctg 300
 cagtggagca gcctgaaggc ctcggacacc gccatgtatt actgtgagag agggggtaac 360
 tggaactgct ttgactactg gggccaggga accctgggtc ccgtctcctc agcctccacc 420
 aaggggcccat cggctcttccc cctggcaccc tcctccaaga gcacctctgg gggcacagcg 480
 gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 540
 ggcgccctga ccagcggcgt gcacaccttc ccggtgttcc tacagtcctc aggactctac 600
 tccctcagca gcgtgggtgac cgtgccctcc agcagcttgg gcaccagac ctacatctgc 660
 aacgtgaatc acaagcccag caacaccaag gtggacaaga gagttgagcc caaatcttgt 720
 gacaaaactc acacatgccc accgtgcccga gcacctgaac tcctggggggg accgtcagtc 780
 ttcctcttcc ccccaaacc caaggacacc ctcatgatct cccggacccc tgaggtcaca 840
 tgcgtggtgg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac 900
 ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac 960
 cgtgtggtca gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag 1020
 tgcaaggctc ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa 1080
 gggcagcccc gagaaccaca ggtgtacacc ctgccccat cccgggatga gctgaccaag 1140
 aaccagggtc gcctgacctg cctgggtcaa ggcttctatc ccagcgacat cgccgtggag 1200
 tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc 1260
 gacggctcct tcttctctc cagcaagctc accgtggaca agagcaggtg gcagcagggg 1320
 aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 1380
 ctctccctgt ctccgggtaa a 1401

<210> 108
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 108

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

A-2063-WO-PCT_SeqList_ST25-092817

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

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

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

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

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

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

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

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

Pro Gly Lys
465

<210> 109
<211> 723
<212> DNA
<213> Homo sapiens

<400> 109
atggacatga ggggtgccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc 60
agatgtgatg ttgtgatgac tcagtctcca ctctccctgc ccgtcacccc tggagagccg 120
gcctccatct cctgcaggtc tagtcagagc ctctgcata gtaatggata caactatttg 180
gattgggtacc tgcagaagcc agggcagtct ccacagctcc tgatctatatt gggtttcta 240
cgggcctccg gggtcctga caggttcagt ggcagtggat caggcacaga ttttacactg 300
aaaatcagca ggggtggaggc tgaggatgtt ggggtttatt actgcatgca aggtacacac 360
tggcctctga cgttcggcca agggaccaag gtggagatca aacgaactgt ggctgcacca 420

A-2063-WO-PCT_SeqList_ST25-092817

tctgtcttca tcttcccgcc atctgatgag cagttgaaat ctggaactgc ctctgttgtg	480
tgcctgctga ataacttcta tcccagagag gccaaagtac agtggaaggt ggataacgcc	540
ctccaatcgg gtaactccca ggagagtgtc acagagcagg acagcaagga cagcacctac	600
agcctcagca gcaccctgac gctgagcaaa gcagactacg agaaacacaa agtctacgcc	660
tgcgaagtca cccatcaggg cctgagctcg cccgtcacia agagcttcaa caggggagag	720
tgt	723

<210> 110
 <211> 241
 <212> PRT
 <213> Homo sapiens

<400> 110

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

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

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

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

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

Tyr Tyr Cys Met Gln Gly Thr His Trp Pro Leu Thr Phe Gly Gln Gly
 115 120 125

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

Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val
 145 150 155 160

Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
 165 170 175

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
 180 185 190

A-2063-WO-PCT_SeqList_ST25-092817

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
195 200 205

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr
210 215 220

His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu
225 230 235 240

Cys

<210> 111
<211> 1413
<212> DNA
<213> Homo sapiens

<400> 111
atggacatga gggTGccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc 60
agatgtcagg tgcagctgca ggagtcgggc ccaggactgg tgaagccttc ggggaccctg 120
tccctcacct gcgctgtctc tggTggctcc atcagcagta gtaactggtg gagttgggtc 180
cgccagcccc cagggaaggg gctggagtg attggggaaa tctatcatag tgggagcacc 240
aactacaacc cgtccctcaa gagtcgagtc accatatcag tagacaagtc caagaaccag 300
ttctccctga agctgagctc tgtgaccgcc gcggacacgg ccgtgtatta ctgtgcgaga 360
tggaaccgggc gtactgatgc ttttgatatc tggggccaag ggacaatggt caccgtctct 420
agtgcctcca ccaagggcc atcggctctc cccctggcac cctcctcaa gagcacctct 480
gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg 540
tcgtggaact caggcgccct gaccagcggc gtgcacacct tcccggctgt cctacagtcc 600
tcaggactct actccctcag cagcgtggtg accgtgccct ccagcagctt gggcaccag 660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gaaagttgag 720
cccaaattct gtgacaaaac tcacacatgc ccaccgtgcc cagcacctga actcctgggg 780
ggaccgtcag tcttcctctt cccccaaaa cccaaggaca ccctcatgat ctcccgacc 840
cctgaggtca catgcgtggt ggtggacgtg agccacgaag accctgaggt caagttcaac 900
tggtacgtgg acggcgtgga ggtgcataat gccaagacaa agccgcggga ggagcagtac 960
aacagcacgt accgtgtggt cagcgtcctc accgtcctgc accaggactg gctgaatggc 1020
aaggagtaca agtgcaaggt ctccaacaaa gccctccag ccccatcga gaaaaccatc 1080
tccaaagcca aagggcagcc ccgagaacca caggtgtaca ccctgcccc atcccgggat 1140
gagctgacca agaaccaggt cagcctgacc tgcctggtca aaggcttcta tcccagcgac 1200
atcgccgtgg agtgggagag caatgggcag ccggagaaca actacaagac cagcctccc 1260
gtgctggact ccgacggctc cttcttcctc tatagcaagc tcaccgtgga caagagcagg 1320
tggcagcagg ggaacgtctt ctcatgctcc gtgatgcatg aggtcttgca caaccactac 1380

acgcagaaga gcctctccct gtctccgggt aaa

1413

<210> 112
 <211> 471
 <212> PRT
 <213> Homo sapiens

<400> 112

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

Gly Ser Ile Ser Ser Ser Asn Trp Trp Ser Trp Val Arg Gln Pro Pro
 50 55 60

Gly Lys Gly Leu Glu Trp Ile Gly Glu Ile Tyr His Ser Gly Ser Thr
 65 70 75 80

Asn Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Lys
 85 90 95

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

Thr Ala Val Tyr Tyr Cys Ala Arg Trp Thr Gly Arg Thr Asp Ala Phe
 115 120 125

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

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

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

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

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

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
 210 215 220

Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu
 Page 115

225 230 235 240

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
245 250 255

Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
275 280 285

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

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
325 330 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
340 345 350

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

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

Asn 385 Gln Val Ser Leu Thr 390 Cys Leu Val Lys Gly 395 Phe Tyr Pro Ser Asp 400

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
405 410 415

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

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
450 455 460

Leu Ser Leu Ser Pro Gly Lys
465 470

<210>	113
<211>	702
<212>	DNA
<213>	Homo sapiens

A-2063-WO-PCT_SeqList_ST25-092817

```

<400> 113
atggaagcgc cggcgagct tctcttcctc ctgctactct ggctcccaga taccactgga      60
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctctctggga aagagccacc      120
ctctcctgca gggccagtca gagtgtttagc agcaacttag cctgggtcca gcagaaacct      180
ggccaggctc ccaggcccct catctatgat gcatccacca gggccactgg tgtcccagcc      240
aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctgcagtct      300
gaagattttg cagtttatta ctgtcagcag tatgataact ggccgctcac tttcggcgga      360
gggaccaagg tggagatcaa acgtacggtg gctgcaccat ctgtcttcat cttcccgcga      420
tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat      480
cccagagagg ccaaagtaca gtggaagggtg gataacgccc tccaatcggg taactcccag      540
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg      600
ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc      660
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gt                          702

```

```

<210> 114
<211> 234
<212> PRT
<213> Homo sapiens

```

```

<400> 114
Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1          5          10          15

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

Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
35         40         45

Val Ser Ser Asn Leu Ala Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro
50         55         60

Arg Pro Leu Ile Tyr Asp Ala Ser Thr Arg Ala Thr Gly Val Pro Ala
65         70         75         80

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

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

Asn Trp Pro Leu Thr Phe Gly Gly Gly Thr Lys Val 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

```

A-2063-WO-PCT_SeqList_ST25-092817

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> 115
<211> 1383
<212> DNA
<213> Homo sapiens

<400> 115
atggagtgga cctggagggt ccttttcttg gtggcagcag caacaggtgc cactcccag 60
gttcagctgg tgcagtctgg agctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120
tgcaaggctt ctggttacac ctttaccaga tatggtatca gctgggtgcg acaggccctc 180
ggacaagggc ttgagtggat gggatggatc agcacttaca gtggtaacac aaactatgca 240
cagaagctcc agggcagagt caccatgacc acagacacat ccacgagcac agcctacatg 300
gagctgagga gcctgagatc tgacgacacg gccgtgtatt actgtgagag acggcagctt 360
tactttgact actggggcca gggaaccctg gtcaccgtct cctcagctag caccaagggc 420
ccatcggtct tccccctggc gccctgctcc aggagcacct ccgagagcac agcggccctg 480
ggctgcctgg tcaaggacta cttccccgaa ccggtgacgg tgtcgtggaa ctcaggcgct 540
ctgaccagcg gcgtgcacac cttcccagct gtcctacagt cctcaggact ctactccctc 600
agcagcgtgg tgaccgtgcc ctccagcaac ttcggcacc agacctacac ctgcaacgta 660
gatcacaagc ccagcaacac caaggtggac aagacagttg agcgcaaata ttgtgtcgag 720
tgcccaccgt gccagcacc acctgtggca ggaccgtcag tcttcctctt cccccaaaa 780
cccaaggaca ccctcatgat ctcccggacc cctgaggtca cgtgcgtggt ggtggacgtg 840
agccacgaag accccgaggt ccagttcaac tggtagctgg acggcgtgga ggtgcataat 900
gccaagacaa agccacggga ggagcagttc aacagcacgt tccgtgtggt cagcgtcctc 960
accgttgtgc accaggactg gctgaacggc aaggagtaca agtgcaaggt ctccaacaaa 1020
ggcctcccag ccccatcga gaaaaccatc tccaaaacca aagggcagcc ccgagaacca 1080
caggtgtaca ccctgcccc atcccgggag gagatgacca agaaccaggt cagcctgacc 1140

A-2063-WO-PCT_SeqList_ST25-092817

tgcttggtca aaggcttcta ccccagcgac atcgccgtgg agtgggagag caatgggcag	1200
ccggagaaca actacaagac cacacctccc atgctggact ccgacggctc cttcttcctc	1260
tacagcaagc tcaccgtgga caagagcagg tggcagcagg ggaacgtctt ctcattgtcc	1320
gtgatgcatg aggctctgca caaccactac acgcagaaga gcctctccct gtctccgggt	1380
aaa	1383

<210> 116
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 116

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

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

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

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

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

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

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

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

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

Pro	Leu	Ala	Pro	Cys	Ser	Arg	Ser	Thr	Ser	Glu	Ser	Thr	Ala	Ala	Leu
145					150					155					160

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

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

Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

195

200

205

Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro
 210 215 220

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

Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu
 245 250 255

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

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

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

Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu
 305 310 315 320

Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
 325 330 335

Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
 340 345 350

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

Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
 370 375 380

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
 385 390 395 400

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly
 405 410 415

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
 420 425 430

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
 435 440 445

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 450 455 460

<210> 117

<211> 717
 <212> DNA
 <213> Homo sapiens

<400> 117
 atgaggctcc ctgctcagct cctggggctg ctaatgctct ggatacctgg atccagtgca 60
 gatattgtga tgaccagac tccactctct ctgtccgtca cccctggaca gccggcctcc 120
 atctcctgca agtctggtca gagcctcctg catagtgatg gaaagacctt tttgtattgg 180
 tacctgcaga agccaggcca gcctccacag ttcctgatct atgaagtttc caaccggttc 240
 tctagagtgc cagatagggt cagtggcagc gggtcagga cagatttcac actgagaatc 300
 agccgggtgg aggctgagga tgttggaatt tattactgca tgcaaagtat acagcttccg 360
 tggacgttcg gccaaaggac ccagggtgaa atcaaacgaa ctgtggctgc accatctgtc 420
 ttcatcttcc cgccatctga tgagcagttg aaatctggaa ctgcctctgt tgtgtgcctg 480
 ctgaataact tctatcccag agaggccaaa gtacagtgga aggtggataa cgccctccaa 540
 tcgggtaact cccaggagag tgtcacagag caggacagca aggacagcac ctacagcctc 600
 agcagcacc tgacgctgag caaagcagac tacgagaaac acaaagtcta cgcctgcgaa 660
 gtcacccatc agggcctgag ctgcccgtc acaaagagct tcaacagggg agagtgt 717

<210> 118
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 118
 Met Arg Leu Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Ile Pro
 1 5 10 15
 Gly Ser Ser Ala Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser
 20 25 30
 Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Gly Gln Ser
 35 40 45
 Leu Leu His Ser Asp Gly Lys Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys
 50 55 60
 Pro Gly Gln Pro Pro Gln Phe Leu Ile Tyr Glu Val Ser Asn Arg Phe
 65 70 75 80
 Ser Arg Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 85 90 95
 Thr Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Val Gly Ile Tyr Tyr
 100 105 110
 Cys Met Gln Ser Ile Gln Leu Pro Trp Thr Phe Gly Gln Gly Thr Gln
 115 120 125

A-2063-WO-PCT_SeqList_ST25-092817

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

Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
145 150 155 160

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

Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
180 185 190

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

Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
210 215 220

Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 119
<211> 1377
<212> DNA
<213> Homo sapiens

<400> 119
atggagtttg ggctgagctg ggttttcctc gttgctcttt taagaggtgt ccagtgtcag 60
gtgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc 120
tgtgcagcct ctggattcac cttcagtggc tatggcatgc actgggtccg ccaggctcca 180
ggcaaggggc tggagtgggt ggcagttata tcatatgatg gaaatgataa atactatgca 240
gactccgtga agggccgatt caccatctcc agagacaatg ccaagaacac gctgtatctg 300
caaatgaaca gcctgagagc tgaggacacg gctgtgtatt actgtgctgag agagctacgg 360
gtcctctggg gccagggaa cctggtcacc gtctctagtg cctccaccaa gggcccatcg 420
gtcttcccc tggcgccctg ctccaggagc acctccgaga gcacagcggc cctgggctgc 480
ctgggtcaagg actacttccc cgaaccggtg acgggtgtcgt ggaactcagg cgctctgacc 540
agcggcgtgc acaccttccc agctgtccta cagtcctcag gactctactc cctcagcagc 600
gtggtgaccg tgccctccag caacttcggc acccagacct acacctgcaa cgtagatcac 660
aagcccagca acaccaaggt ggacaagaca gttgagcgca aatgttgtgt cgagtgccca 720
ccgtgcccag caccacctgt ggcaggaccg tcagtcttcc tcttcccccc aaaacccaag 780
gacaccctca tgatctcccc gaccctgag gtcacgtgcg tgggtggtgga cgtgagccac 840
gaagaccccg aggtccagtt caactggtag gtggacggcg tggaggtgca taatgccaa 900
acaaagccac gggaggagca gttcaacagc acgttccgtg tggtcagcgt cctcaccgtt 960
gtgcaccagg actggctgaa cggcaaggag tacaagtgca aggtctccaa caaaggcctc 1020

A-2063-WO-PCT_SeqList_ST25-092817

ccagcccccac tcgagaaaaac catctccaaa accaaagggc agcccccagaga accacagggtg 1080
 tacaccctgc ccccatcccg ggaggagatg accaagaacc aggtcagcct gacctgcctg 1140
 gtcaaaggct tctaccccag cgacatcgcc gtggagtggg agagcaatgg gcagccggag 1200
 aacaactaca agaccacacc tcccatgctg gactccgacg gctccttctt cctctacagc 1260
 aagctcaccg tggacaagag caggtggcag caggggaacg tcttctcatg ctccgtgatg 1320
 catgaggctc tgcacaacca ctacacgcag aagagcctct ccctgtctcc gggtaaa 1377

<210> 120
 <211> 459
 <212> PRT
 <213> Homo sapiens

<400> 120

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

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

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

Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Asn Asp Lys Tyr Tyr Ala
 65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Glu Leu Arg Val Leu Trp Gly Gln Gly Thr Leu
 115 120 125

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

Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys
 145 150 155 160

Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
 165 170 175

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

A-2063-WO-PCT_SeqList_ST25-092817

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

Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn
210 215 220

Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro
225 230 235 240

Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro
245 250 255

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

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn
275 280 285

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
290 295 300

Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val
305 310 315 320

Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
325 330 335

Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys
340 345 350

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
355 360 365

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
370 375 380

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
385 390 395 400

Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe
405 410 415

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

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
435 440 445

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
450 455

A-2063-WO-PCT_SeqList_ST25-092817

<210> 121
<211> 705
<212> DNA
<213> Homo sapiens

<400> 121
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcc 60
agatgtgaca tccagatgac ccagtctcca tcctccctgt ctgcatctgt aggtgaccgt 120
gtcaccatca cttgccgcgc aagtcaggat attagcagct atttaaattg gtatcagcag 180
aaaccaggga aagcccctaa gctcctgata tattctactt cccgtttgaa tagtgggggtc 240
ccatcacgct tcagtggcag tggctctggg acagatttca ctctcaccat cagcagctctg 300
caacctgaag attttgcaac ttactactgt caacaggata ttaaacaccc tacgttcggt 360
caaggcacca aggtggagat caaacgtacg gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 122
<211> 235
<212> PRT
<213> Homo sapiens

<400> 122
Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15
Leu Arg Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
20 25 30
Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
35 40 45
Gln Asp Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys
50 55 60
Ala Pro Lys Leu Leu Ile Tyr Ser Thr Ser Arg Leu Asn Ser Gly Val
65 70 75 80
Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
85 90 95
Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
100 105 110
Asp Ile Lys His Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

115

120

125

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 123
 <211> 1395
 <212> DNA
 <213> Homo sapiens

<400> 123
 atggactgga cctggaggat cctcttcttg gtggcagcag ccacaggagc ccaactccgag 60
 gtgcagctgg tgcagtctgg ggctgaggtg aagaagcctg ggtcctcggt gaaggctctcc 120
 tgcaaggctt ctggttttac cttcaccgac tatattatgc actgggtgcg tcaggccctt 180
 ggtcaagggc ttgagtggat gggctatatc aacccttata atgatgacac cgaataacaac 240
 gagaagttca agggccgtgt cacgattacc gcggacaaat ccacgagcac agcctacatg 300
 gagctgagca gcctgcgctc tgaggacacg gccgtgtatt actgtgcgcg ttcgatttat 360
 tactacgatg ccccgtttgc ttactggggc caagggactc tggtcaccgt ctctagtgcc 420
 tccaccaagg gcccacggt cttccccctg gcgcccgtgt ccaggagcac ctccgagagc 480
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 540
 aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 600
 ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 660
 acctgcaacg tagatcaciaa gcccagcaac accaaggtgg acaagacagt tgagcgcaaa 720
 tgttgtgtcg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 780
 ttcccccaa aaccaagga caccctcatg atctcccga cccctgaggt cacgtgcgtg 840
 gtggtggacg tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg 900
 gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 960

A-2063-WO-PCT_SeqList_ST25-092817

gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgcaag 1020
gtctccaaca aaggcctccc agcccccatc gagaaaacca tctccaaaac caaagggcag 1080
ccccgagaac cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag 1140
gtcagcctga cctgcctggg caaaggcttc taccacagcg acatcgccgt ggagtgggag 1200
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1260
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1320
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1380
ctgtctccgg gtaaa 1395

<210> 124
<211> 465
<212> PRT
<213> Homo sapiens

<400> 124

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

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

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

Thr Asp Tyr Ile Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
50 55 60

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

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

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

Tyr Tyr Cys Ala Arg Ser Ile Tyr Tyr Tyr Asp Ala Pro Phe Ala Tyr
115 120 125

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

Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser
145 150 155 160

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val
210 215 220

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

Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro
245 250 255

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

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

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

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

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

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

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

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

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

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

Lys
465

<210> 125
<211> 699
<212> DNA
<213> Homo sapiens

<400> 125
atggggtcaa ccgccatcct tggcctcctc ctggctgtcc tgcagggagg gcgcgcctcc 60
tatgtgctga ctcagccacc ctcggtgtca gtggccccag gacagacggc caggattacc 120
tgtgggggaa acaaccttgg aagtaaaagt gtgacttgtt accagcagaa gccaggccag 180
gccctgtgtc tggctgtcta tgatgatagc gaccggccct catggatccc tgagcgattc 240
tctgggtcca actctgggaa cacggccacc ctgaccatca gcaggggcca agccggggat 300
gaggccgact attactgtca ggtgtgggat agtagtagtg atcatgttgt attcggcgga 360
gggaccaagc tgaccgtcct aggccaaccg aaagcggcgc cctcggtcac tctgttccc 420
ccctcctctg aggagcttca agccaacaag gccacactgg tgtgtctcat aagtgacttc 480
taccggggag ccgtgacagt ggcctggaag gcagatagca gccccgtcaa ggcgggagtg 540
gagaccacca caccctcaa acaaagcaac aacaagtacg cggccagcag ctatctgagc 600
ctgacgcctg agcagtggaa gtcccacaga agctacagct gccaggtcac gcatgaaggg 660
agcaccgtgg agaagacagt ggcccctaca gaatgttca 699

<210> 126
<211> 233
<212> PRT
<213> Homo sapiens

<400> 126

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

Gly Arg Ala Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala
20 25 30

Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Leu Gly Ser
35 40 45

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

Val Val Tyr Asp Asp Ser Asp Arg Pro Ser Trp Ile Pro Glu Arg Phe
65 70 75 80

Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Arg Gly
Page 129

Glu Ala Gly Asp₁₀₀ Glu Ala Asp Tyr Tyr₁₀₅ Cys Gln Val Trp Asp₁₁₀ Ser Ser

Ser Asp His₁₁₅ Val Val Phe Gly Gly₁₂₀ Gly Thr Lys Leu Thr₁₂₅ Val Leu Gly

Gln Pro₁₃₀ Lys Ala Ala Pro Ser₁₃₅ Val Thr Leu Phe Pro₁₄₀ Pro Ser Ser Glu

Glu Leu Gln Ala Asn Lys₁₅₀ Ala Thr Leu Val Cys₁₅₅ Leu Ile Ser Asp Phe₁₆₀

Tyr Pro Gly Ala Val₁₆₅ Thr Val Ala Trp Lys₁₇₀ Ala Asp Ser Ser Pro₁₇₅ Val

Lys Ala Gly Val₁₈₀ Glu Thr Thr Thr Pro₁₈₅ Ser Lys Gln Ser Asn₁₉₀ Asn Lys

Tyr Ala Ala Ser Ser Tyr Leu Ser₂₀₀ Leu Thr Pro Glu Gln₂₀₅ Trp Lys Ser

His Arg₂₁₀ Ser Tyr Ser Cys Gln₂₁₅ Val Thr His Glu Gly₂₂₀ Ser Thr Val Glu

Lys Thr Val Ala Pro Thr₂₃₀ Glu Cys Ser

<210> 127
<211> 1401
<212> DNA
<213> Homo sapiens

<400> 127
atgggggtcaa ccgccatcct tggcctcctc ctggctgtcc tgcagggagg gcgcgcccag 60
atgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc 120
tgtgcagcgt ctggattcac cttcagaacc tatggcatgc actgggtccg ccaggctcca 180
ggcaagggac tggagtgggt ggcagttata tggatatgat gaagtaataa acactatgca 240
gactccgtga agggccgatt caccatcacc agagacaatt ccaagaacac tctgaatctg 300
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgcgag agcccctcag 360
tgggagctag ttcatgaagc ttttgatatc tggggccaag ggacaatggt caccgtctct 420
tcagctagca ccaagggccc atcggctctc cccctggcgc cctgctccag gagcacctcc 480
gagagcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg 540
tcgtggaact caggcgctct gaccagcggc gtgcacacct tcccagctgt cctacagtcc 600
tcaggactct actccctcag cagcgtggtg accgtgccct ccagcaactt cggcaccag 660
acctacacct gcaacgtaga tcacaagccc agcaacacca aggtggacaa gacagttgag 720

A-2063-WO-PCT_SeqList_ST25-092817

cgcaaatgtt gtgtcgagt cccaccgtgc ccagcaccac ctgtggcagg accgtcagtc 780
 ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcacg 840
 tgcgtggtgg tggacgtgag ccacgaagac cccgaggtcc agttcaactg gtacgtggac 900
 ggcgtggagg tgcataatgc caagacaaag ccacgggagg agcagttcaa cagcacgttc 960
 cgtgtggtca gcgtcctcac cgttgtgcac caggactggc tgaacggcaa ggagtacaag 1020
 tgcaaggtct ccaacaaagg cctcccagcc cccatcgaga aaaccatctc caaaacaaaa 1080
 gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggagga gatgaccaag 1140
 aaccaggtca gcctgacctg cctggtcaaa ggcttctacc ccagcgacat cgccgtggag 1200
 tgggagagca atgggcagcc ggagaacaac tacaagacca cacctcccat gctggactcc 1260
 gacggctcct tcttctcta cagcaagctc accgtggaca agagcaggtg gcagcagggg 1320
 aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 1380
 ctctccctgt ctccgggtaa a 1401

<210> 128
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 128

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

Gly Arg Ala Gln Met Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln
 20 25 30

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

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

Glu Trp Val Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys His Tyr Ala
 65 70 75 80

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

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

Tyr Tyr Cys Ala Arg Ala Pro Gln Trp Glu Leu Val His Glu Ala Phe
 115 120 125

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

A-2063-WO-PCT_SeqList_ST25-092817

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

Pro Gly Lys
465

<210> 129
<211> 702
<212> DNA
<213> Homo sapiens

<400> 129
atgggtgtgc ctactcatct cctgggtttg ttgctgctct ggattacaca tgccatatgt 60
gatatccgga tgacacagtc tccagcttcc ctgtctgcat ctctgggaga aactgtcaac 120
atcgaatgtc tagcaagtga ggacatttac agtgatttag catggtatca gcagaagcca 180
gggaaatctc ctcagctcct gatctataat gcaaatagct tgcaaaatgg ggtcccttca 240
cggttttagtg gcagtggatc tggcacacag tattctctaa aaataaacag cctgcaatct 300
gaagatgtcg cgacttattt ctgtcaacaa tataacaatt atcctccgac gttcgggtgga 360
ggcaccaagc tggaattgaa acgggctgat gctgcaccaa ctgtatctat cttcccacca 420
tccacggaac agttagcaac tggaggtgcc tcagtcgtgt gcctcatgaa caacttctat 480
cccagagaca tcagtgtcaa gtggaagatt gatggcactg aacgacgaga tgggtgtcctg 540
gacagtgtta ctgatcagga cagcaaagac agcacgtaca gcatgagcag caccctctcg 600
ttgaccaagg ctgactatga aagtcataac ctctatacct gtgaggttgt tcataagaca 660
tcatacctcac ccgtcgtcaa gagcttcaac aggaatgagt gt 702

<210> 130
<211> 234
<212> PRT
<213> Homo sapiens

<400> 130
Met Gly Val Pro Thr His Leu Leu Gly Leu Leu Leu Leu Trp Ile Thr
1 5 10 15

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

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

Ile Tyr Ser Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro
Page 133

50

55

60

Gln Leu Leu Ile Tyr Asn Ala Asn Ser Leu Gln Asn 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 Val Ala Thr Tyr Phe Cys Gln Gln Tyr Asn
100 105 110

Asn Tyr Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Leu Lys Arg
115 120 125

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

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

Pro Arg Asp Ile Ser Val Lys Trp Lys Ile Asp Gly Thr Glu Arg Arg
165 170 175

Asp Gly Val Leu Asp Ser Val Thr Asp Gln Asp Ser Lys Asp Ser Thr
180 185 190

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

His Asn Leu Tyr Thr Cys Glu Val Val His Lys Thr Ser Ser Ser Pro
210 215 220

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

<210> 131
<211> 1395
<212> DNA
<213> Homo sapiens

<400> 131
atggacatca ggctcagctt ggctttcctt gtccttttca taaaaggtgt ccagtgtgag 60
gtacagctgg tggagtctgg cggaggattg gtacagcctg caaactccct gaaactctcc 120
tgtgcagcct caggattcac tttagtgac tatgccatgg cctgggtccg ccagtctcca 180
aagaagggtc tggagtgggt cgcaaccatt atttatgatg gtagtagcac ttactatcga 240
gactccgtga agggccgatt cactatctcc agagataatg caaaaagcac cctatacctg 300
caaatggaca gtctgaggtc tgaggacacg gccacttatt actgtgcaac aggtctgggt 360
atagctacgg actactttga ttactggggc caaggagtcc tggtcacagt ctctcagct 420
gaaacaacag ccccatctgt ctatccactg gtccttgga ctgctctcaa aagtaactcc 480

A-2063-WO-PCT_SeqList_ST25-092817

atggtgaccc tgggatgcct ggtcaagggc tatttccttg agccagtcac cgtgacctgg 540
aactctggag ccctgtccag cgggtgtgcac accttccag ctgtcctgca gtctgggctc 600
tacactctca ccagctcagt gactgtaccc tccagcacct ggcccagcca gaccgtcacc 660
tgcaacgtag cccacccggc cagcagcacc aaggtggaca agaaaattgt gcccagaaac 720
tgtggagggtg attgcaagcc ttgtatatgt acaggctcag aagtatcatc tgtcttcatc 780
ttccccccaa agcccaaaga tgtgctcacc atcactctga ctctaaggt cacgtgtgtt 840
gtggtagaca ttagccagga cgatcccgag gtccatttca gctggtttgt agatgacgtg 900
gaagtccaca cagctcagac tcgaccacca gaggagcagt tcaacagcac tttccgctca 960
gtcagtgaac tccccatcct gcaccaggac tggctcaatg gcaggacgtt cagatgcaag 1020
gtcaccagtg cagctttccc atccccatc gagaaaacca tctccaaacc cgaaggcaga 1080
acacaagttc cgcatgtata caccatgtca cctaccaagg aagagatgac ccagaatgaa 1140
gtcagtatca cctgcatggt aaaaggcttc tatccccag acatttatgt ggagtggcag 1200
atgaacgggc agccacagga aaactacaag aacactccac ctacgatgga cacagatggg 1260
agttacttcc tctacagcaa gctcaatgtg aagaaggaaa aatggcagca gggaaacacg 1320
ttcacgtgtt ctgtgctgca tgaaggcctg cacaaccacc atactgagaa gagtctctcc 1380
cactctccgg gtaaa 1395

<210> 132
<211> 465
<212> PRT
<213> Homo sapiens

<400> 132

Met Asp Ile Arg Leu Ser Leu Ala Phe Leu Val Leu Phe Ile Lys Gly
1 5 10 15

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

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

Ser Asp Tyr Ala Met Ala Trp Val Arg Gln Ser Pro Lys Lys Gly Leu
50 55 60

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Tyr Tyr Cys Ala Thr Gly Leu Gly Ile Ala Thr Asp Tyr Phe Asp Tyr
 115 120 125
 Trp Gly Gln Gly Val Leu Val Thr Val Ser Ser Ala Glu Thr Thr Ala
 130 135 140
 Pro Ser Val Tyr Pro Leu Ala Pro Gly Thr Ala Leu Lys Ser Asn Ser
 145 150 155 160
 Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr Phe Pro Glu Pro Val
 165 170 175
 Thr Val Thr Trp Asn Ser Gly Ala Leu Ser Ser Gly Val His Thr Phe
 180 185 190
 Pro Ala Val Leu Gln Ser Gly Leu Tyr Thr Leu Thr Ser Ser Val Thr
 195 200 205
 Val Pro Ser Ser Thr Trp Pro Ser Gln Thr Val Thr Cys Asn Val Ala
 210 215 220
 His Pro Ala Ser Ser Thr Lys Val Asp Lys Lys Ile Val Pro Arg Asn
 225 230 235 240
 Cys Gly Gly Asp Cys Lys Pro Cys Ile Cys Thr Gly Ser Glu Val Ser
 245 250 255
 Ser Val Phe Ile Phe Pro Pro Lys Pro Lys Asp Val Leu Thr Ile Thr
 260 265 270
 Leu Thr Pro Lys Val Thr Cys Val Val Val Asp Ile Ser Gln Asp Asp
 275 280 285
 Pro Glu Val His Phe Ser Trp Phe Val Asp Asp Val Glu Val His Thr
 290 295 300
 Ala Gln Thr Arg Pro Pro Glu Glu Gln Phe Asn Ser Thr Phe Arg Ser
 305 310 315 320
 Val Ser Glu Leu Pro Ile Leu His Gln Asp Trp Leu Asn Gly Arg Thr
 325 330 335
 Phe Arg Cys Lys Val Thr Ser Ala Ala Phe Pro Ser Pro Ile Glu Lys
 340 345 350
 Thr Ile Ser Lys Pro Glu Gly Arg Thr Gln Val Pro His Val Tyr Thr
 355 360 365
 Met Ser Pro Thr Lys Glu Glu Met Thr Gln Asn Glu Val Ser Ile Thr
 370 375 380

A-2063-WO-PCT_SeqList_ST25-092817

Cys Met Val Lys Gly Phe Tyr Pro Pro Asp Ile Tyr Val Glu Trp Gln
385 390 395 400

Met Asn Gly Gln Pro Gln Glu Asn Tyr Lys Asn Thr Pro Pro Thr Met
405 410 415

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

Glu Lys Trp Gln Gln Gly Asn Thr Phe Thr Cys Ser Val Leu His Glu
435 440 445

Gly Leu His Asn His His Thr Glu Lys Ser Leu Ser His Ser Pro Gly
450 455 460

Lys
465

<210> 133
<211> 711
<212> DNA
<213> Homo sapiens

<400> 133
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagagggtgcc 60
agatgtgagt ctgccctgac tcagcctgcc tccgtgtctg ggtctcctgg acagtcgac 120
accatctcct gcactggaac cagcagtac gttggtggtt ataactctgt ctctgtgtac 180
caacagcacc caggcaaagc ccccaaactc atgatttatg aggtcagtaa tcggccctca 240
ggggtttcta atcgcttctc tggctccaag tctggcaaca cggcctccct gaccatctct 300
gggctccagg ctgaggacga ggctgattat tactgcaatt catatacaag caccagcatg 360
gtattcggcg gagggaccaa gctgaccgtc ctaggtcagc ccaaggctgc cccctcggtc 420
actctgttcc cgccctcctc tgaggagctt caagccaaca aggccacact ggtgtgtctc 480
ataagtgact tctaccggg agccgtgaca gtggcctgga aggcagatag cagccccgtc 540
aaggcgggag tggagaccac cacaccctcc aaacaaagca acaacaagta cgcggccagc 600
agctatctga gcctgacgcc tgagcagtgg aagtcccaca gaagctacag ctgccaggtc 660
acgcatgaag ggagcaccgt ggagaagaca gtggccccta cagaatgttc a 711

<210> 134
<211> 237
<212> PRT
<213> Homo sapiens

<400> 134

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Trp
1 5 10 15

Leu Arg Gly Ala Arg Cys Glu Ser Ala Leu Thr Gln Pro Ala Ser Val

20

25

30

Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser
 35 40 45

Ser Asp Val Gly Gly Tyr Asn Ser Val Ser Trp Tyr Gln Gln His Pro
 50 55 60

Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Val Ser Asn Arg Pro Ser
 65 70 75 80

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

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

Asn Ser Tyr Thr Ser Thr Ser Met Val Phe Gly Gly Gly Thr Lys Leu
 115 120 125

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

Pro Ser Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu
 145 150 155 160

Ile Ser Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp
 165 170 175

Ser Ser Pro Val Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln
 180 185 190

Ser Asn Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu
 195 200 205

Gln Trp Lys Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly
 210 215 220

Ser Thr Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
 225 230 235

<210> 135
 <211> 1380
 <212> DNA
 <213> Homo sapiens

<400> 135
 atggactgga cctggaggat ccttttcttg gtggcagcag ccacaggtgt ccactccgag 60
 gttcagctgg tgcagtctgg agctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120
 tgcaaggctt ctggttacac ctttaaccagc tatggtatca gctgggtgcg acaggcccct 180
 ggacaagggc ttgagtggat gggatgggtc agtttttata atggtaacac aaactatgca 240

A-2063-WO-PCT_SeqList_ST25-092817

cagaagctcc agggcagagg caccatgacc acagacccat ccacgagcac agcctacatg 300
gagctgagga gcctgagatc tgacgacacg gccgtgtatt actgtgagag aggctacggt 360
atggacgtct ggggccaagg gaccacggtc accgtctcct ctgcctccac caagggccca 420
tcggtcttcc ccctggcgcc ctgctccagg agcacctccg agagcacagc ggccctgggc 480
tgcctgggtca aggactactt ccccgaaccg gtgacgggtg cgtggaactc aggcgctctg 540
accagcggcg tgcacacctt cccagctgtc ctacagtcct caggactcta ctccctcagc 600
agcgtggtga ccgtgccctc cagcaacttc ggcaccaga cctacacctg caacgtagat 660
cacaagccca gcaacaccaa ggtggacaag acagttgagc gcaaattgtg tgtcgagtgc 720
ccaccgtgcc cagcaccacc tgtggcagga ccgtcagtct tcctcttccc cccaaaaccc 780
aaggacaccc tcatgatctc ccggaccct gaggtcacgt gcgtgggtgg ggacgtgagc 840
cacgaagacc ccgaggtcca gttcaactgg tacgtggacg gcgtggaggt gcataatgcc 900
aagacaaagc cacgggagga gcagttcaac agcacgttcc gtgtgggtcag cgtcctcacc 960
gttgtgcacc aggactggct gaacggcaag gagtacaagt gcaaggtctc caacaaaggc 1020
ctcccagccc ccatcgagaa aaccatctcc aaaaccaaag ggcagccccg agaaccacag 1080
gtgtacaccc tgccccatc ccgggaggag atgaccaaga accagggtcag cctgacctgc 1140
ctggtcaaag gcttctaccc cagcgacatc gccgtggagt gggagagcaa tgggcagccg 1200
gagaacaact acaagaccac acctcccatg ctggactccg acggctcctt cttcctctac 1260
agcaagctca ccgtggacaa gagcaggtgg cagcagggga acgtcttctc atgctccgtg 1320
atgcatgagg ctctgcacaa ccactacacg cagaagagcc tctccctgtc tccgggtaaa 1380

<210> 136
<211> 460
<212> PRT
<213> Homo sapiens

<400> 136

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

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

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

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

Glu Trp Met Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala
65 70 75 80

Gln Lys Leu Gln Gly Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser
Page 139

Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr
 115 120 125
 Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro
 130 135 140
 Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly
 145 150 155 160
 Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn
 165 170 175
 Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln
 180 185 190
 Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
 195 200 205
 Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser
 210 215 220
 Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys
 225 230 235 240
 Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe
 245 250 255
 Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
 260 265 270
 Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe
 275 280 285
 Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
 290 295 300
 Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr
 305 310 315 320
 Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
 325 330 335
 Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr
 340 345 350
 Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
 Page 140

355

360

365

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
 370 375 380

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
 385 390 395 400

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser
 405 410 415

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
 420 425 430

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
 435 440 445

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 450 455 460

<210> 137
 <211> 693
 <212> DNA
 <213> Homo sapiens

<400> 137
 atggcatgga tccctctctt cctcggcgtc cttgcttact gcacaggatc cgtggcctcc 60
 tatgaggtga ctcaggcacc ctcaagtgtc gtgtccccag gacagacagc cagcatcacc 120
 tgctctggag ataaattggg ggataaatat gcttggttgg atcagcagaa gccaggccag 180
 tcccctgtgc tggatcatcta tcaagatagc aagcggccct cagggatccc tgagcgattc 240
 tctggctcca actctggaaa cacagccact ctgaccatca gcgggacca ggctatggat 300
 gaggtgact attactgtca ggcgtgggac agcagcactg cggtattcgg cggagggacc 360
 aagctgaccg tcctaggtca gcccaaggct gccccctcgg tcaactctgtt cccgccctcc 420
 tctgaggagc ttcaagccaa caaggccaca ctggtgtgtc tcataagtga cttctaccgc 480
 ggagccgtga cagtggcctg gaaggcagat agcagccccg tcaaggcggg agtggagacc 540
 accacaccct ccaaacaag caacaacaag tacgcggcca gcagctatct gaggctgacg 600
 cctgagcagt ggaagtccca cagaagctac agctgccagg tcacgcatga agggagcacc 660
 gtggagaaga cagtggcccc tacagaatgt tca 693

<210> 138
 <211> 231
 <212> PRT
 <213> Homo sapiens

<400> 138

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

A-2063-WO-PCT_SeqList_ST25-092817

Ser Val Ala Ser Tyr Glu Val Thr Gln Ala Pro Ser Val Ser Val Ser
20 25 30

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

Lys Tyr Ala Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Val Leu
50 55 60

Val Ile Tyr Gln Asp Ser Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe
65 70 75 80

Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Thr
85 90 95

Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Ser Ser
100 105 110

Thr Ala Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro
115 120 125

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

Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro
145 150 155 160

Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala
165 170 175

Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala
180 185 190

Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Arg
195 200 205

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

Val Ala Pro Thr Glu Cys Ser
225 230

<210> 139
<211> 1401
<212> DNA
<213> Homo sapiens

<400> 139
atggactgga cctggagcat ccttttcttg gtggcagcag caacaggtgc ccactcccag 60

gttcagctgg tgcagtctgg agctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120

tgcaaggctt ctggttacac ctttaccagt tatggtctca gctgggtgcg acaggcccct 180

A-2063-WO-PCT_SeqList_ST25-092817

```

ggacaagggc ttgagtggat gggatggatc atcccttaca atggtaacac aaactctgca      240
cagaaactcc agggcagagt caccatgacc acagacacat ccacgagcac agcctacatg      300
gagctgagga gcctgagatc tgacgacacg gccgtgtatt tctgtgagag agacagggac      360
tacggtgtca attatgatgc ttttgatata tggggccaag ggacaatggt caccgtctct      420
tcagcctcca ccaagggccc atcgggtcttc cccctggcgc cctgctccag gagcacctcc      480
gagagcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg      540
tcgtggaact caggcgctct gaccagcggc gtgcacacct tcccagctgt cctacagtcc      600
tcaggactct actccctcag cagcgtggtg accgtgccct ccagcaactt cggcaccacg      660
acctacacct gcaacgtaga tcacaagccc agcaacacca aggtggacaa gacagttgag      720
cgcaaagtgt gtgtcagagt cccaccgtgc ccagcaccac ctgtggcagg accgtcagtc      780
ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcacg      840
tgcgtgggtg tggacgtgag ccacgaagac cccgaggtcc agttcaactg gtacgtggac      900
ggcgtggagg tgcataatgc caagacaaag ccacgggagg agcagttcaa cagcacgttc      960
cgtgtgggtc gcgtcctcac cgttgtgcac caggactggc tgaacggcaa ggagtacaag     1020
tgcaagggtct ccaacaaagg cctcccagcc cccatcgaga aaaccatctc caaaacaaaa     1080
gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggagga gatgaccaag     1140
aaccagggtc gcctgacctg cctgggtcaa ggcttctacc ccagcgacat cgccgtggag     1200
tgggagagca atgggcagcc ggagaacaac tacaagacca cacctcccat gctggactcc     1260
gacggctcct tcttcctcta cagcaagctc accgtggaca agagcaggtg gcagcagggg     1320
aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc     1380
ctctccctgt ctccgggtaa a                                           1401

```

<210> 140
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 140

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

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

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

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

Glu Trp Met Gly Trp Ile Ile Pro Tyr Asn Gly Asn Thr Asn Ser Ala
 Page 143

65 70 75 80
 Gln Lys Leu Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser
 85 90 95
 Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val
 100 105 110
 Tyr Phe Cys Ala Arg Asp Arg Asp Tyr Gly Val Asn Tyr Asp Ala Phe
 115 120 125
 Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Thr
 130 135 140
 Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser
 145 150 155 160
 Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
 165 170 175
 Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
 180 185 190
 Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
 195 200 205
 Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys
 210 215 220
 Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu
 225 230 235 240
 Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala
 245 250 255
 Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
 260 265 270
 Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
 275 280 285
 Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val
 290 295 300
 His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe
 305 310 315 320
 Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly
 325 330 335
 Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile
 Page 144

340

345

350

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

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

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

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

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

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

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

Pro Gly Lys
 465

<210> 141
 <211> 705
 <212> DNA
 <213> Homo sapiens

<400> 141
 atggcctggg ctccactact tctcaccctc ctcgctcact gcacagggtc ttgggccaat 60
 tttatgctga ctcagcccca ctctgtgtcg gagtctccgg ggaagacggt ggccatctcc 120
 tgcacccgca acagtggcag cattgccagc aactctgtgc agtggtacca gcagcgcccc 180
 ggcagttccc ccaccactgt gatctttgag gataaccaa gaccctctgg ggtccctgat 240
 cggttctctg gtcctatcga cagctcctcc aactctgcct ccctcaccat ctctgggtctg 300
 aagactgagg acgaggctga ctactactgt cagtcttatg atagcaacaa ttgggtgttc 360
 ggcggaggga ccaaactgac cgtcctaggt cagcccaagg ccaacccac tgtcactctg 420
 ttcccgccct cctctgagga gtcceaagcc aacaaggcca cactagtgtg tctgatcagt 480
 gacttctacc cgggagctgt gacagtggcc tggaaggcag atggcagccc cgtcaaggcg 540
 ggagtggaga ccaccaaacc ctccaaacag agcaacaaca agtacgcggc cagcagctac 600
 ctgagcctga cgcccgagca gtggaagtcc cacagaagct acagctgcca ggtcacgcat 660
 gaagggagca ccgtggagaa gacagtggcc cctacagaat gttca 705

<210> 142
 <211> 235

<212> PRT
 <213> Homo sapiens

<400> 142

```

Met Ala Trp Ala Pro Leu Leu Leu Thr Leu Leu Ala His Cys Thr Gly
 1          5          10          15

Ser Trp Ala Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser
          20          25          30

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

Ala Ser Asn Ser Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ser Pro
 50          55          60

Thr Thr Val Ile Phe Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp
65          70          75          80

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

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

Tyr Asp Ser Asn Asn Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val
          115          120          125

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

Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser
145          150          155          160

Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser
          165          170          175

Pro Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn
          180          185          190

Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp
          195          200          205

Lys Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr
210          215          220

Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
225          230          235

```

<210> 143
 <211> 1410
 <212> DNA

<213> Homo sapiens

<400> 143

```

atggagtttg ggctgagctg ggttttcctc gttgctcttt taagaggtgt ccagtgtcag      60
gtgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc      120
tgtgcagcgt ctggattcac cttcagtagc tatgtcatgc actgggtccg ccaggctcca      180
ggcaaggggc tggagtgggt ggctgttata tggatatgat gaagtaataa atactatgca      240
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctg      300
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgagag agaggggtat      360
gactacggtg aagactacta ctactacggt atggacgtct ggggcccaagg gaccacggtc      420
accgtctcta gtgcctccac caagggccca tcggtcttcc ccctggcgcc ctgctccagg      480
agcacctccg agagcacagc ggccctgggc tgcctggtca aggactactt ccccgaaaccg      540
gtgacggtgt cgtggaactc aggcgtcttg accagcggcg tgcacacctt cccagctgtc      600
ctacagtcct caggactcta ctccctcagc agcgtggtga ccgtgccctc cagcaacttc      660
ggcaccaga cctacacctg caacgtagat cacaagccca gcaacaccaa ggtggacaag      720
acagttgagc gcaaatgttg tgtcgagtgc ccaccgtgcc cagcaccacc tgtggcagga      780
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccctt      840
gaggtcacgt gcgtgggtgg ggacgtgagc cacgaagacc ccgaggtcca gttcaactgg      900
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cacgggagga gcagttcaac      960
agcacgttcc gtgtggtcag cgtcctcacc gttgtgcacc aggactggct gaacggcaag     1020
gagtacaagt gcaaggtctc caacaaaggc ctcccagccc ccatcgagaa aaccatctcc     1080
aaaaccaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggaggag     1140
atgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctaccc cagcgacatc     1200
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac acctcccatg     1260
ctggactccg acggctcctt cttcctctac agcaagctca ccgtggacaa gagcaggtgg     1320
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg     1380
cagaagagcc tctccctgtc tccgggtaaa                                1410

```

<210> 144

<211> 470

<212> PRT

<213> Homo sapiens

<400> 144

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

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
Page 147

35

40

45

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

Glu Trp Val Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
 65 70 75 80

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

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

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

Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 130 135 140

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

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

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

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 195 200 205

Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr
 210 215 220

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

Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro
 245 250 255

Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 260 265 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 275 280 285

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

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn
 Page 148

305 310 315 320

Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp
325 330 335

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

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

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

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

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

Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
420 425 430

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
435 440 445

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

Ser Leu Ser Pro Gly Lys
465 470

<210> 145
<211> 708
<212> DNA
<213> Homo sapiens

<400> 145
atggacatga gggccccgc tcagctcctg gggctcctgc tactctggct ccgaggtgcc 60
agatgtgaca tccagatgac ccagctctcca tcctccctct ccgcatccgt aggcgaccgc 120
gtaaccataa catgtagagc atctcaagat atttccaact atttgaattg gtaccaacaa 180
aaacccggca aagcacctaa actcctcatt tactatacat caagactcct ctccggcggtt 240
ccatcacgat ttcaggctc cggctccggc acagatttca cactcactat ttctccctc 300
caaccagaag attttgcaac ctattactgt caacaaggcg atacactccc atacacattc 360
ggcggcggca caaaagtga aattaaacgt acgggtggctg caccatctgt cttcatcttc 420
ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
ttctatccca gagaggccaa agtacagtgg aagggtggata acgccctcca atcgggtaac 540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600

ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660
 cagggcctga gctcgcccggt caciaagagc ttcaacaggg gagagtgt 708

<210> 146
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 146

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

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

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

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

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

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

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

Gly Asp Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile
 115 120 125

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

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 147
<211> 1404
<212> DNA
<213> Homo sapiens

<400> 147
atggactgga cctggaggat cctcttcttg gtggcagcag ccacaggagc ccactccgag 60
gtgcagctgg tgcagagcgg cgccgaggta aaaaaaccag gagcaagcgt taaagtttct 120
tgtaaagcaa gcggatatac atttacagat tacaacatgc attgggtaag acaagcgcca 180
ggacaaggat tggaatggat gggcgaaatt aaccctaata gtggaggagc aggctacaat 240
caaaaattca aaggagagat tacaatgaca acagacacaa gcacttcaac agcatatatg 300
gaactgcat cacttagaag cgacgataca gctgtatact attgcgacg acttggttat 360
gatgatatat atgatgactg gtatttcgat gtttggggcc aggaacaac agttaccgtc 420
tctagtgcct ccaccaaggg cccatcggtc ttccccctgg cgccctgctc caggagcacc 480
tccgagagca cagcggccct gggctgcctg gtcaaggact acttccccga accggtgacg 540
gtgtcgtgga actcaggcgc tctgaccagc ggcgtgcaca ccttcccagc tgtcctacag 600
tcctcaggac tctactccct cagcagcgtg gtgaccgtgc cctccagcaa cttcggcacc 660
cagacctaca cctgcaacgt agatcacaag cccagcaaca ccaaggtgga caagacagtt 720
gagcgcaaat gttgtgtcga gtgcccaccg tgcccagcac cacctgtggc aggaccgtca 780
gtcttctct tcccccaaa acccaaggac accctcatga tctcccggac ccctgaggtc 840
acgtgctggtg tggtggacgt gagccacgaa gaccccgagg tccagttcaa ctggtacgtg 900
gacggcgtgg aggtgcataa tgccaagaca aagccacggg aggagcagtt caacagcacg 960
ttccgtgtgg tcagcgtcct caccgttgtg caccaggact ggctgaacgg caaggagtac 1020
aagtgaagg tctccaacaa aggcctcca gccccatcg agaaaaccat ctccaaaacc 1080
aaagggcagc cccgagaacc acaggtgtac accctgcccc catcccggga ggagatgacc 1140
aagaaccagg tcagcctgac ctgcctggtc aaaggcttct accccagcga catcgccgtg 1200
gagtgggaga gcaatgggca gccggagaac aactacaaga ccacacctcc catgctggac 1260
tccgacggct ctttcttct ctacagcaag ctcaccgtgg acaagagcag gtggcagcag 1320
gggaacgtct tctcatgctc cgtgatgcat gaggctctgc acaaccacta cacgcagaag 1380
agcctctccc tgtctccggg taaa 1404

<210> 148
<211> 468
<212> PRT
<213> Homo sapiens

<400> 148

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
Page 151

1 5 10 15
 Ala His Ser Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
 20 25 30
 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
 35 40 45
 Thr Asp Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
 50 55 60
 Glu Trp Met Gly Glu Ile Asn Pro Asn Ser Gly Gly Ala Gly Tyr Asn
 65 70 75 80
 Gln Lys Phe Lys Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser
 85 90 95
 Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg Leu Gly Tyr Asp Asp Ile Tyr Asp Asp Trp Tyr
 115 120 125
 Phe Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser
 130 135 140
 Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr
 145 150 155 160
 Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
 165 170 175
 Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 180 185 190
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205
 Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr
 210 215 220
 Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys Thr Val
 225 230 235 240
 Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val
 245 250 255
 Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 260 265 270
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
 Page 152

275

280

285

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

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr
 305 310 315 320

Phe Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp Leu Asn
 325 330 335

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

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

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

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

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

Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 420 425 430

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

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

Ser Pro Gly Lys
 465

<210> 149
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 149
 atggtgttgc agaccaggt cttcatttct ctgttgcctt ggatctctgg tgcctacggg 60
 gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 120
 atcaactgca agtccagcca gagtgtttta gacagctccg acaataagaa ctacttagct 180
 tgggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctaaccgg 240
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 300
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtgat 360

A-2063-WO-PCT_SeqList_ST25-092817

ccattcactt tcggccctgg gaccaaagtg gatatcaaac gtacggtggc tgcaccatct 420
gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 480
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacgccttc 540
caatcgggta actcccagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 600
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt ctacgcctgc 660
gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 720

<210> 150
<211> 240
<212> PRT
<213> Homo sapiens
<400> 150

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

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

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

Val Leu Asp Ser Ser Asp Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln
50 55 60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Asn Arg
65 70 75 80

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

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

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

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

Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys
145 150 155 160

Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
165 170 175

Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln
180 185 190

A-2063-WO-PCT_SeqList_ST25-092817

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

Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
210 215 220

Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235 240

<210> 151
<211> 1395
<212> DNA
<213> Homo sapiens

<400> 151
atggactgga cctggagcat ccttttcttg gtggcagcac caacaggtgc cactcccag 60
gttcagctgg tgcagtctgg agctgaggtg aagaagcctg gggcctcagt gaaggtctcc 120
tgcaaggctt ctggttacac ctttaccagc tatggtatca gctgggtgcg acaggcccct 180
ggacaagggc ttgagtggat gggatggatc agcgcttaca atggtaacac aaactatgca 240
cagaagctcc agggcagagt caccatgacc acagacacat ccacgagcac agcctacatg 300
gagctgagga gcctgagatc tgacgacacg gccgtgtatt actgtgctgag agagtcgtgg 360
ttcggggagg tattctttga ctactggggc cagggaaacc tggtcaccgt ctctcagct 420
agcaccaagg gcccatcggt cttccccctg gcgcccctgt ccaggagcac ctccgagagc 480
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 540
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 600
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 660
acctgcaacg tagatcacia gccagcaac accaaggtgg acaagacagt tgagcgcaaa 720
tgttggtgctg agtgcccacc gtgcccagca ccacctgtgg caggaccgtc agtcttcctc 780
ttccccccaa aaccaagga caccctcatg atctcccga cccctgaggt cacgtgctgtg 840
gtggtggacg tgagccacga agaccccgag gtccagttca actggtacgt ggacggcgtg 900
gaggtgcata atgccaagac aaagccacgg gaggagcagt tcaacagcac gttccgtgtg 960
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgaag 1020
gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaagggcag 1080
ccccgagaac cacaggtgta caccctgccc ccatcccggg aggagatgac caagaaccag 1140
gtcagcctga cctgcctggt caaaggcttc taccacagcg acatcgccgt ggagtgaggag 1200
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1260
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1320
ttctcatgct ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc 1380
ctgtctccgg gtaaa 1395

<210> 152
 <211> 465
 <212> PRT
 <213> Homo sapiens

<400> 152

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

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

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

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

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

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

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

Tyr Tyr Cys Ala Arg Glu Ser Trp Phe Gly Glu Val Phe Phe Asp Tyr
 115 120 125

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

Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser
 145 150 155 160

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

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

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

Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val
 210 215 220

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

Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro
 Page 156

A-2063-WO-PCT_SeqList_ST25-092817

gtcaccatca cttgtcgggc gagtcagggt attagcagct ggtagcctg gtatcaacag 180
aaaccagggg aagcccctaa gctcctgata tatggtgcat ccaatttgga aagtgggggc 240
ccatcaaggt tcagcggcag tggatctggg acagatttca ctctcaccat cagcagcctg 300
cagcctgaag attttgcaaa ttactattgt caacaggcta acagtttccc gtggacgttc 360
ggccaagggg ccaaggtgga aatcaaactg acggtggctg caccatctgt cttcatcttc 420
ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
ttctatccca gagaggccaa agtacagtgg aagggtgata acgccctcca atcgggtaac 540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
ctgacgctga gcaaagcaga ctacagaaaa cacaaagtct acgcctgcga agtcacccat 660
cagggcctga gctcgcccggt cacaaagagc ttcaacaggg gagagtgt 708

<210> 154
<211> 236
<212> PRT
<213> Homo sapiens
<400> 154

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

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

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 155
<211> 1398
<212> DNA
<213> Homo sapiens

<400> 155
atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtcagg tccagctggg acagtctggg gctgaggtga agaagcctgg ggcctcagtg 120
aaggcttcct gcaagggttc cggatacacc ctcagtgatt tatccatcca ctgggtgcga 180
caggctcctg gaaaagggtc tgagtggatg ggaggttttg atcctcaaga tggtgaaaca 240
atctacgcac agaagttcca gggcagagtc accatgaccg aggacacatc tacagacaca 300
gcctacatgg agctgagcag cctgaaatct gaggacacgg ccgtgtatta ctgcaaacg 360
gggagcagct cgtcctgggt cgaccctgg ggccaggga ccctgggtcac cgtctctagt 420
gcctccacca agggcccatc ggtcttcccc ctggcgccct gctccaggag cacctccgag 480
agcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 540
tggaactcag gcgctctgac cagcggcgtg cacaccttcc cagctgtcct acagtcctca 600
ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcaacttcgg caccagacc 660
tacacctgca acgtagatca caagcccagc aacaccaagg tggacaagac agttgagcgc 720
aaatgtttgtg tcgagtggcc accgtgccc gcaccacctg tggcaggacc gtcagtcttc 780
ctcttcccc caaaaccaa ggacaccctc atgatctccc ggaccctga ggtcacgtgc 840
gtggtggtgg acgtgagcca cgaagacccc gaggtccagt tcaactggta cgtggacggc 900
gtggaggtgc ataatgcaa gacaaagcca cgggaggagc agttcaacag cacgttccgt 960
gtggtcagcg tcctcaccgt tgtgcaccag gactggctga acggcaagga gtacaagtgc 1020
aaggcttcca acaaaggcct ccagcccc atcgagaaaa ccatctccaa aaccaaaggg 1080
cagccccgag aaccacaggt gtacaccctg ccccatccc gggaggagat gaccaagaac 1140
caggtcagcc tgacctgcct ggtcaaaggc ttctaccca gcgacatcgc cgtggagtgg 1200
gagagcaatg ggcagccgga gaacaactac aagaccacac ctcccatgct ggactccgac 1260

A-2063-WO-PCT_SeqList_ST25-092817

ggctccttct tcctctacag caagctcacc gtggacaaga gcaggtggca gcaggggaac 1320
gtcttctcat gtcctgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc 1380
tccctgtctc cgggtaaa 1398

<210> 156
<211> 466
<212> PRT
<213> Homo sapiens

<400> 156

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

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

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

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

Lys Gly Leu Glu Trp Met Gly Gly Phe Asp Pro Gln Asp Gly Glu Thr
65 70 75 80

Ile Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Glu Asp Thr
85 90 95

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

Thr Ala Val Tyr Tyr Cys Ala Thr Gly Ser Ser Ser Ser Trp Phe Asp
115 120 125

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

Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu
145 150 155 160

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

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

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
195 200 205

Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn
Page 160

210

215

220

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

Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala 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 Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
 290 300

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

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

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

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

Thr Leu Pro Pro Ser Arg Glu Glu Met 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 Met
 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> 157

<211> 702
 <212> DNA
 <213> Homo sapiens

<400> 157
 atggagaccc ctgcccagct gctgttcctg ctgctgctgt ggctgcccga cacaaccggc 60
 gaaatcgtca tgacacagag ccctgccaca ctgtccgtga gccctggaga gagggctacc 120
 ctgagctgca gggcttccca gagcgtgagc agcaacctgg cctggtacca acagaagcct 180
 ggccaggccc ctaggctgct gatctacggc gctgctacca gggccaccgg tattcctgcc 240
 aggggtgtccg gctccggatc cggcaccgag tttaccctga ccatcagcag cctgcagagc 300
 gaggacttcg ccgtgtacta ctgtcagcaa tacaacaact ggcccctgac ctttggcggc 360
 ggcaccaagg tggagatcaa gaggacagtg gccgccccca gcgtgttcat cttccctccc 420
 agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gtctgctgaa caacttctac 480
 cccagggagg ccaaggtgca gtggaaggtg gacaacgccc tgcagtccgg caactcccag 540
 gagtccgtga ccgagcagga ctccaaggac tccacctact ccctgtcctc caccctgacc 600
 ctgtccaagg ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc 660
 ctgtcctccc ctgtgaccaa gagcttcaac aggggcgagt gc 702

<210> 158
 <211> 234
 <212> PRT
 <213> Homo sapiens

<400> 158
 Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro
 1 5 10 15
 Asp Thr Thr Gly Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser
 20 25 30
 Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
 35 40 45
 Val Ser Ser Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
 50 55 60
 Arg Leu Leu Ile Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro Ala
 65 70 75 80
 Arg Val Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
 85 90 95
 Ser Leu Gln Ser Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn
 100 105 110
 Asn Trp Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
 115 120 125

A-2063-WO-PCT_SeqList_ST25-092817

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> 159
<211> 1416
<212> DNA
<213> Homo sapiens

<400> 159
atggatatgc ggggtccctgc tcagctgctg ggactgctgc tgctgtggct gaggggcgcc 60
aggtgtcagg tgcagctggt cgaaagcggg ggaggagtgg tgcagcccgg aagggtccctg 120
aggctgtcct gcgccgctag cggcttcacc ttttccaact acggcatgca ctgggtgagg 180
caagcccctg gagagggcct ggaatgggtg gctgctatct ggttcgacgc cagcgacaag 240
tactatgccg acgctgtgaa gggccgggtc accatcagca gggacaacag caagaacacc 300
ctctacctgc agatgaacag cctccggggc gaggacaccg ctgtctatta ctgtgccagg 360
gaccaggcca tcttcggagt ggtccccgat tactggggcc agggaaccct ggtgaccgtg 420
tcctccgctt ccacaaaggg acctagcgtg ttccctctgg cccctagcag caagtccaca 480
agcggaggaa cagccgccct gggctgtctc gtgaaggact attttcccga gcccgtagacc 540
gtgtcctgga actccggagc cctgacctcc ggcgtgcata cattccccgc tgtcctgcag 600
tccagcggcc tctactccct gtcctccgtg gtcaccgtgc ctagcagcag cctgggcacc 660
cagacatata tctgcaacgt caaccacaag cttccaaca ccaaggtgga caagaaggtg 720
gagcccaagt cctgtgacaa gaccacacc tgtcctccct gtcctgctcc tgagctgctg 780
ggaggcccct ccgtcttcct gttccctccc aagcccaagg acaccctgat gatctccagg 840
acccctgaag tgacatgtgt ggtggtggat gtgagccacg aagatcccga ggtgaagtcc 900
aactggtacg tggacggcgt ggaggtgcac aacgctaaaa caagccctg cgaggagcag 960
tacggatcca cctacagggtg cgtgtccgtg ctcaccgtgc tccatcagga ctggctgaac 1020

A-2063-WO-PCT_SeqList_ST25-092817

ggaaaagagt acaagtgcaa agtcagcaat aaggccctgc cgcgccctat cgagaaaacc 1080
atcagcaagg ccaaaggcca gcccaggag cctcaggtgt ataccctgcc tccctccagg 1140
gaggagatga ccaagaacca ggtgagcctg acctgcctcg tgaagggtt ttatccctcc 1200
gacatcgctg tggagtggga gagcaatggc cagcctgaaa acaactacaa aaccaccccc 1260
cctgtgctgg atagcgacgg cagcttcttc ctctactcca agctgaccgt cgataagtcc 1320
cgggtggcagc agggcaacgt gtttagctgc agcgtgatgc acgaagccct gcataaccac 1380
tacaccaga agagcctgag cctcagcccc ggaaag 1416

<210> 160
<211> 472
<212> PRT
<213> Homo sapiens
<400> 160

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1 5 10 15

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

Val Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
35 40 45

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

Glu Gly Leu Glu Trp Val Ala Ala Ile Trp Phe Asp Ala Ser Asp Lys
65 70 75 80

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

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

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Gln Ala Ile Phe Gly Val Val
115 120 125

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

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

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

Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val

180

185

190

His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205
 Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
 210 215 220
 Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val
 225 230 235 240
 Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 245 250 255
 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 260 265 270
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 275 280 285
 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
 290 295 300
 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln
 305 310 315 320
 Tyr Gly Ser Thr Tyr Arg Cys Val Ser Val Leu Thr Val Leu His Gln
 325 330 335
 Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
 340 345 350
 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
 355 360 365
 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
 370 375 380
 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
 385 390 395 400
 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
 405 410 415
 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
 420 425 430
 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
 435 440 445
 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys

450

455

460

Ser Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 161
<211> 702
<212> DNA
<213> Homo sapiens

<400> 161
atggagacc ctgcccagct gctgttcctg ctgctgctgt ggctgcccga cacaaccggc 60
gaaatcgtcc tgacacagag ccctgccaca ctgtccctga gccctggaga gagggctacc 120
ctgagctgca gggcttccca gagcgtgagc agcaacctgg cctggtacca acagaagcct 180
ggccaggccc ctaggctgct gatctacggc gctgctacca gggccaccgg tattcctgac 240
agggtgtccg gctccggatc cggcaccgag tttaccctga ccatcagccg cctggagccc 300
gaggacttcg ccgtgtacta ctgtcagcaa tacaacaact ggcccctgac ctttggcggc 360
ggcaccaagg tggagatcaa gaggacagtg gccgccccca gcgtgttcat cttccctccc 420
agcgacgagc agctgaagag cggcaccgcc agcgtggtgt gtctgctgaa caacttctac 480
cccagggagg ccaaggtgca gtggaagggtg gacaacgccc tgcagtccgg caactcccag 540
gagtccgtga ccgagcagga ctccaaggac tccacctact ccctgtcctc caccctgacc 600
ctgtccaagg ccgactacga gaagcacaag gtgtacgcct gcgaggtgac ccaccagggc 660
ctgtcctccc ctgtgaccaa gagcttcaac aggggcgagt gc 702

<210> 162
<211> 234
<212> PRT
<213> Homo sapiens

<400> 162
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15
Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
20 25 30
Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
35 40 45
Val Ser Ser Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
50 55 60
Arg Leu Leu Ile Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro Asp
65 70 75 80
Arg Val Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
85 90 95

A-2063-WO-PCT_SeqList_ST25-092817

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

Asn Trp Pro Leu Thr Phe Gly Gly Gly Thr Lys Val 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> 163
<211> 1416
<212> DNA
<213> Homo sapiens

<400> 163
atggatatgc gggtcctgc tcagctgctg ggactgctgc tgctgtggct gaggggcgcc 60
agggtgtgagg tgcagctggt cgaaagcgga ggaggagtgg tgcagcccgg agggtcctgc 120
aggctgtcct gcgccgctag cggcttcacc ttttccaact acggcatgca ctgggtgagg 180
caagcccctg gagagggcct ggaatgggtg gctgctatct ggttcgacgc cagcgacaag 240
tactatgccg acgctgtgaa gggccggttc accatcagca gggacaacgc caagaacacc 300
ctctacctgc agatgaacag cctccgggcc gaggacaccg ctgtctatta ctgtgccagg 360
gaccaggcca tcttcggagt ggtccccgat tactggggcc agggaaccct ggtgaccgtg 420
tcctccgctt ccacaaaggg acctagcgtg ttccctctgg cccctagcag caagtccaca 480
agcggaggaa cagccgccct gggctgtctc gtgaaggact attttcccga gcccgtagacc 540
gtgtcctgga actccggagc cctgacctcc ggcgtgcata cattccccgc tgtcctgcag 600
tccagcggcc tctactccct gtcctccgtg gtcaccgtgc ctagcagcag cctgggcacc 660
cagacataca tctgcaacgt caaccacaag ctttccaaca ccaaggtgga caagaaggtg 720
gagcccaagt cctgtgacaa gaccacacc tgtcctccct gtcctgctcc tgagctgctg 780

A-2063-WO-PCT_SeqList_ST25-092817

```

ggaggcccct ccgtcttcct gttccctccc aagcccaagg acaccctgat gatctccagg      840
acccctgaag tgacatgtgt ggtggtggat gtgagccacg aagatcccga ggtgaagttc      900
aactggtacg tggacggcgt ggaggtgcac aacgctaaaa caaagccctg cgaggagcag      960
tacggatcca cctacaggtg cgtgtccgtg ctcaccgtgc tccatcagga ctggctgaac     1020
ggaaaagagt acaagtgcaa agtcagcaat aaggccctgc ccgcccctat cgagaaaacc     1080
atcagcaagg ccaaaggcca gcccaggagg cctcaggtgt atacctgcc tccctccagg     1140
gaggagatga ccaagaacca ggtgagcctg acctgcctcg tgaagggtt ttatccctcc     1200
gacatcgctg tggagtggga gagcaatggc cagcctgaaa acaactacaa aaccaccccc     1260
cctgtgctgg atagcgacgg cagcttcttc ctctactcca agctgaccgt cgataagtcc     1320
cgggtggcagc agggcaacgt gtttagctgc agcgtgatgc acgaagccct gcataaccac     1380
tacaccaga agagcctgag cctcagcccc ggaaag                                1416

```

```

<210> 164
<211> 472
<212> PRT
<213> Homo sapiens

```

<400> 164

```

Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
1          5          10          15

```

```

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

```

```

Val Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
          35          40          45

```

```

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

```

```

Glu Gly Leu Glu Trp Val Ala Ala Ile Trp Phe Asp Ala Ser Asp Lys
65          70          75          80

```

```

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

```

```

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

```

```

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Gln Ala Ile Phe Gly Val Val
          115          120          125

```

```

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

```

```

Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr

```

145 150 155 160

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr

420

425

430

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
 435 440 445

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
 450 455 460

Ser Leu Ser Leu Ser Pro Gly Lys
 465 470

<210> 165
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 165
 atgaggctcc ctgctcagct cctggggctg ctaatgctct gggtccttgg atccagtggg 60
 gatattgtga tgaccagac tccactctcc tcacctgtca cccttggaaca gccggcctcc 120
 atctcctgca ggtctagtca aagcctcgta cacagtgatg gaaacaccta cttgaattgg 180
 cttcagcaga ggccaggcca gcctccaaga ctcttaattt ataagatttc taaccggttc 240
 tctgggggtcc cagacagatt cactggcagt ggggcagga cagatttcac actgaaaatc 300
 agcaggggtg aagctgagga tgtcgggggt tatacctgca tgcaagttac acaatttcct 360
 ctcaccttcg gccaaaggac acgactggag attaaacgaa ctgtggctgc accatctgtc 420
 ttcatcttcc cgccatctga tgagcagttg aaatctggaa ctgcctctgt tgtgtgcctg 480
 ctgaataact tctatcccag agaggccaaa gtacagtgga aggtggataa cgccctccaa 540
 tcgggtaact cccaggagag tgtcacagag caggacagca aggacagcac ctacagcctc 600
 agcagcacc tgacgctgag caaagcagac tacgagaaac acaaagtcta cgctgcgaa 660
 gtcacccatc agggcctgag ctgcccgtc acaaagagct tcaacagggg agagtgt 717

<210> 166
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 166

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

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

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

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

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

Cys Met Gln Val Thr Gln Phe Pro Leu Thr Phe Gly Gln Gly Thr Arg
115 120 125

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

Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
145 150 155 160

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

Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
180 185 190

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

Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
210 215 220

Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 167
<211> 1410
<212> DNA
<213> Homo sapiens

<400> 167
atggacacac ttgctacac actcctgctg ctgaccaccc cttcctgggt cttgtcccag 60
gtcaccttga aggagtctgg tcctgtgctg ctgaaacca cagagaccct cacgctgacc 120
tgcaccgtct ctgggttctc actcagcaat gctagaatgg gtgtgagctg gatccgtcag 180
ccccaggga aggccctgga gtggcttgca cacatttttt cgaatgacga aaaatcctac 240
atcacatctc tgaagagcag gtcaccatc tccaaggaca cctccaaaag ccaggtggtc 300
cttaccatga ccaacatgga ccctgtggac acagccacat attactgtgc acggataccc 360
ctacgatccc cgggtgcttt tgatatctgg ggccaaggga caatgggtcac cgtctcttca 420
gcctccacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg 480
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacgggtgtcg 540

A-2063-WO-PCT_SeqList_ST25-092817

tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca	600
ggactctact ccctcagcag cgtggtgacc gtgccctcca gcagcttggg caccagacc	660
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagag agttgagccc	720
aaatcttgtg acaaaaactca cacatgcca ccggtgccag cacctgaact cctgggggga	780
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccctt	840
gaggtcacat gcgtggtggt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg	900
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac	960
agcacgtacc gtgtggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag	1020
gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc	1080
aaagccaaag ggagcccccg agaaccacag gtgtacaccc tgccccatc ccgggaggag	1140
atgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc	1200
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg	1260
ctggactccg acggctcctt cttcctctat agcaagctca ccgtggacaa gagcaggtgg	1320
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg	1380
cagaagagcc tctcactgtc tccgggtaaa	1410

<210> 168
 <211> 470
 <212> PRT
 <213> Homo sapiens

<400> 168

Met Asp Thr Leu Cys Tyr Thr Leu Leu Leu Leu Thr Thr Pro Ser Trp
 1 5 10 15

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

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

Ser Asn Ala Arg Met Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
 50 55 60

Ala Leu Glu Trp Leu Ala His Ile Phe Ser Asn Asp Glu Lys Ser Tyr
 65 70 75 80

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

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

Thr Tyr Tyr Cys Ala Arg Ile Pro Leu Arg Ser Pro Gly Ala Phe Asp
 Page 172

115

120

125

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

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

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

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

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
 195 200 205

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

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

Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
 245 250 255

Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 260 265 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 275 280 285

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

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

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
 325 330 335

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

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

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

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 Page 173

385 390 395 400

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

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

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
435 440 445

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

Ser Leu Ser Pro Gly Lys
465 470

<210> 169
<211> 705
<212> DNA
<213> Homo sapiens

<400> 169
atggaaaccc cagcgcagct tctcttctc ctgctactct ggctcccaga taccaccgga 60
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120
ctctcctgta gggccagtca gagtgttcgc ggcagggtact tagcctggta ccagcagaaa 180
cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 240
gacaggttca gtggcagtggt gtctgggaca gacttcactc tcaccatcag cagactggag 300
cctgaagatt ttgcagtgtt ttactgtcag cagtatggta gttcacctcg gacgttcggc 360
caagggaacca aggtggaaat caaacgaact gtggctgcac catctgtctt catcttcccg 420
ccatctgatg agcagttgaa atctggaact gcctctgttg tgtgcctgct gaataacttc 480
tatcccagag aggccaaagt acagtggaag gtggataacg ccctccaatc gggtaactcc 540
caggagagtg tcacagagca ggacagcaag gacagcacct acagcctcag cagcaccctg 600
acgctgagca aagcagacta cgagaaacac aaagtctacg cctgcgaagt caccatcag 660
ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 170
<211> 235
<212> PRT
<213> Homo sapiens

<400> 170
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

A-2063-WO-PCT_SeqList_ST25-092817

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
35 40 45

Val Arg Gly Arg Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro
65 70 75 80

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

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

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

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

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

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

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

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

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

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 171
<211> 1401
<212> DNA
<213> Homo sapiens

<400> 171
atggagtttg ggctgagctg gctttttctt gtggctatatt taaaaggtgt ccagtgtgag 60
gtgcagctgt tggagtctgg gggaggcttg gtacagcctg gggggtcctt gagactctcc 120
tgtgcagcct ctggattcac ctttagcagc tatgccatga gctgggtccg ccaggctcca 180
gggaaggggc tggagtgggt ctcaggtatt actgggagtg gtggtagtac atactacgca 240
gactccgtga agggccggtt caccatctcc agagacaatt ccaagaacac gctgtatctg 300

A-2063-WO-PCT_SeqList_ST25-092817

caaatgaaca gcctgagagc cgaggacacg gccgtatatt actgtgcgaa agatccaggg 360
 actacggtga ttatgagttg gttcgacccc tggggccagg gaaccctggt caccgtctcc 420
 tcagcctcca ccaagggccc atcgggtcttc cccctggcgc cctgctccag gagcacctcc 480
 gagagcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacggtg 540
 tcgtggaact caggcgtctt gaccagcggc gtgcacacct tcccagctgt cctacagtcc 600
 tcaggactct actccctcag cagcgtggtg accgtgccct ccagcaactt cggcaccag 660
 acctacacct gcaacgtaga tcacaagccc agcaacacca aggtggacaa gacagttgag 720
 cgaaatgtt gtgtcgagtgc cccaccgtgc ccagcaccac ctgtggcagg accgtcagtc 780
 ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcacg 840
 tgcgtggtgg tggacgtgag ccacgaagac cccgaggtcc agttcaactg gtacgtggac 900
 ggcgtggagg tgcataatgc caagacaaag ccacgggagg agcagttcaa cagcacgttc 960
 cgtgtggtca gcgtcctcac cgttgtgcac caggactggc tgaacggcaa ggagtacaag 1020
 tgcaaggctc ccaacaaagg cctcccagcc cccatcgaga aaaccatctc caaaaccaa 1080
 gggcagcccc gagaaccaca ggtgtacacc ctgccccat cccgggagga gatgaccaag 1140
 aaccagggtca gcctgacctg cctggtcaaa ggcttctacc ccagcgacat cgccgtggag 1200
 tgggagagca atgggcagcc ggagaacaac tacaagacca cacctcccat gctggactcc 1260
 gacggctcct tcttctctta cagcaagctc accgtggaca agagcaggtg gcagcagggg 1320
 aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 1380
 ctctccctgt ctccgggtaa a 1401

<210> 172
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 172

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

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

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45

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

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

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 Page 176

Thr Leu Tyr Leu₁₀₀ Gln Met Asn Ser Leu₁₀₅ Arg Ala Glu Asp Thr₁₁₀ Ala Val

Tyr Tyr Cys₁₁₅ Ala Lys Asp Pro Gly₁₂₀ Thr Thr Val Ile Met₁₂₅ Ser Trp Phe

Asp Pro₁₃₀ Trp Gly Gln Gly Thr₁₃₅ Leu Val Thr Val Ser₁₄₀ Ser Ala Ser Thr

Lys Gly Pro Ser Val Phe₁₅₀ Pro Leu Ala Pro Cys₁₅₅ Ser Arg Ser Thr Ser₁₆₀

Glu Ser Thr Ala Ala₁₆₅ Leu Gly Cys Leu Val₁₇₀ Lys Asp Tyr Phe Pro₁₇₅ Glu

Pro Val Thr Val₁₈₀ Ser Trp Asn Ser Gly₁₈₅ Ala Leu Thr Ser Gly₁₉₀ Val His

Thr Phe Pro₁₉₅ Ala Val Leu Gln Ser₂₀₀ Ser Gly Leu Tyr Ser₂₀₅ Leu Ser Ser

Val Val₂₁₀ Thr Val Pro Ser Ser₂₁₅ Asn Phe Gly Thr Gln₂₂₀ Thr Tyr Thr Cys

Asn Val Asp His Lys Pro₂₃₀ Ser Asn Thr Lys Val₂₃₅ Asp Lys Thr Val Glu₂₄₀

Arg Lys Cys Cys Val₂₄₅ Glu Cys Pro Pro Cys₂₅₀ Pro Ala Pro Pro Val₂₅₅ Ala

Gly Pro Ser Val₂₆₀ Phe Leu Phe Pro Pro₂₆₅ Lys Pro Lys Asp Thr₂₇₀ Leu Met

Ile Ser Arg₂₇₅ Thr Pro Glu Val Thr₂₈₀ Cys Val Val Val Asp₂₈₅ Val Ser His

Glu Asp₂₉₀ Pro Glu Val Gln Phe₂₉₅ Asn Trp Tyr Val Asp₃₀₀ Gly Val Glu Val

His Asn Ala Lys Thr Lys₃₁₀ Pro Arg Glu Glu Gln₃₁₅ Phe Asn Ser Thr Phe₃₂₀

Arg Val Val Ser Val₃₂₅ Leu Thr Val Val His₃₃₀ Gln Asp Trp Leu Asn₃₃₅ Gly

Lys Glu Tyr Lys₃₄₀ Cys Lys Val Ser Asn₃₄₅ Lys Gly Leu Pro Ala₃₅₀ Pro Ile

Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val

355

360

365

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

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

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

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

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

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

Pro Gly Lys
 465

<210> 173
 <211> 714
 <212> DNA
 <213> Homo sapiens

<400> 173
 atggtgttgc agaccaggt cttcatttct ctgttgctct ggatctctgg tgcctacggg 60
 gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 120
 atcaactgca gagccagtga aagtgttgat atttatggca atagttttat gcactggtac 180
 cagcagaaac caggacagcc tcctaagctg ctcatttacc ttgcatccaa cctagaatct 240
 ggggtccctg accgattcag tggcagcggg tctgggacag atttcactct caccatcagc 300
 agcctgcagg ctgaagatgt ggcagtttat tactgtcagc aaaataatga ggatccgtac 360
 acgttcggag gtgggaccaa ggtggaaata aaacgtacgg tggctgcacc atctgtcttc 420
 atcttcccg ccatctgatga gcagttgaaa tctggaactg cctctgttgt gtgcctgctg 480
 aataacttct atcccagaga ggccaaagta cagtgggaagg tggataacgc cctccaatcg 540
 ggtaactccc aggagagtgt cacagagcag gacagcaagg acagcaccta cagcctcagc 600
 agcaccctga cgctgagcaa agcagactac gagaaacaca aagtctacgc ctgcgaagtc 660
 acccatcagg gcctgagctc gcccgtcaca aagagcttca acaggggaga gtgt 714

<210> 174
 <211> 238
 <212> PRT
 <213> Homo sapiens

<400> 174

A-2063-WO-PCT_SeqList_ST25-092817

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

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

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

Val Asp Ile Tyr Gly Asn Ser Phe Met His Trp Tyr Gln Gln Lys Pro
50 55 60

Gly Gln Pro Pro Lys Leu Leu Ile Tyr Leu Ala Ser Asn Leu Glu 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 Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys
100 105 110

Gln Gln Asn Asn Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val
115 120 125

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

Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
145 150 155 160

Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
165 170 175

Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
180 185 190

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

Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly
210 215 220

Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 175
<211> 1398
<212> DNA
<213> Homo sapiens

<400> 175
atggactgga cctggagggt cttctgcttg ctggcagtg cccaggtgc ccactcccag
Page 179

A-2063-WO-PCT_SeqList_ST25-092817

```

gtgcagctgg tgcagtctgg ggctgaggtg aagaagcctg gggcctcagt gaaggtctcc      120
tgcaaggctt ctggatacac cttcaccagt tacaatatgc actgggtgcg ccaggcccct      180
ggacaagggc ttgagtggat gggagttatt tattcaggaa atgggtgatac ttcctacaat      240
cagaagttca aaggcagggt caccattacc gctgacaaat ccaccagcac agcctacatg      300
gagctgagca gcctgagatc tgaggacacg gccgtgtatt actgtgcmag agagagggat      360
actcgttttg gtaactgggg ccaagggact ctggtcaccg tctctagtgc ctccaccaag      420
ggcccatcgg tcttccccct ggcaccctcc tccaagagca cctctggggg cacagcggcc      480
ctgggctgcc tgggtcaagga ctacttcccc gaaccggtga cgggtgcmag gaactcaggc      540
gccctgacca gcggcgtgca caccttcccc gctgtcctac agtcctcagg actctactcc      600
ctcagcagcg tggtgaccgt gccctccagc agcttgggca cccagacctc catctgcaac      660
gtgaatcaca agcccagcaa caccaaggtg gacaagaaag ttgagcccaa atcttgtgac      720
aaaactcaca catgcccacc gtgcccagca cctgaactcc tgggggggacc gtcagtcttc      780
ctcttcccc caaaaccaa ggacaccctc atgatctccc ggaccctga ggtcacatgc      840
gtgggtgggtg acgtgagcca cgaagaccct gaggtcaagt tcaactggta cgtggacggc      900
gtggaggtgc ataatgcaa gacaaagccg cgggaggagc agtaccagag cacgtaccgt      960
gtggtcagcg tcctcaccgt cctgcaccag gactggctga atggcaagga gtacaagtgc     1020
aaggtctcca acaaagccct cccagcccc atcgagaaaa ccatctcaa agccaaaggg     1080
cagccccgag aaccacaggt gtacaccctg ccccatccc gggatgagct gaccaagaac     1140
caggtcagcc tgacctgcct ggtcaaaggc ttctatccca gcgacatcgc cgtggagtgg     1200
gagagcaatg ggcagccgga gaacaactac aagaccacgc ctcccgtgct ggactccgac     1260
ggctccttct tcctctatag caagctcacc gtggacaaga gcaggtggca gcaggggaac     1320
gtcttctcat gctccgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc     1380
tccctgtctc cgggtaaa                                     1398

```

<210> 176
 <211> 466
 <212> PRT
 <213> Homo sapiens
 <400> 176

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

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

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

Thr Ser Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
 Page 180

50

55

60

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

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

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

Tyr Tyr Cys Ala Arg Glu Arg Asp Thr Arg Phe Gly Asn Trp Gly Gln
115 120 125

Gly Thr Leu 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 Gln Ser Thr Tyr Arg
305 310 315 320

Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
Page 181

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> 177
 <211> 705
 <212> DNA
 <213> Homo sapiens

<400> 177
 atggcctggg ctctgctgct cctcactctc ctactcagg acacaggggtc ctgggccag 60
 tctgtgctga ctcagtcacc ctacgctctt gggacccccg ggcagagagt caccatctct 120
 tggttctggaa gcagctccaa catcggcagt aattatgtat actggtacca gcagctccca 180
 ggagcggccc ccaaactcct catccttagg aataatcagc ggccctcagg ggtccctgac 240
 cgattctctg gtcceaagtc tggcacctca gcctccctga ccatcagtgg gctccggtcc 300
 gaggatgagg ctgactatta ttgtgcagca tgggatgaca gcctgagtgg ttgggtgttc 360
 ggcggaggga ccaagctgac cgtcctaggt cagcccaagg ccaacccac tgtcactctg 420
 tccccgccct cctctgagga gtcceaagcc aacaaggcca cactagtgtg tctgatcagt 480
 gacttctacc cgggagctgt gacagtggcc tggaaggcag atggcagccc cgtcaaggcg 540
 ggagtggaga ccaccaaacc ctccaaacag agcaacaaca agtacgcggc cagcagctac 600
 ctgagcctga cgcccagca gtggaagtcc cacagaagct acagctgcca ggtcacgcat 660
 gaagggagca ccgtggagaa gacagtggcc cctacagaat gttca 705

<210> 178
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 178

Met Ala Trp Ala Leu Leu Leu Leu Thr Leu Leu Thr Gln Asp Thr Gly
 1 5 10 15

Ser Trp Ala Gln Ser Val Leu Thr Gln Ser Pro Ser Ala Ser Gly Thr
 20 25 30

Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile
 35 40 45

Gly Ser Asn Tyr Val Tyr Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro
 50 55 60

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

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Thr Ile Ser
 85 90 95

Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp
 100 105 110

Asp Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val
 115 120 125

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

Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser
 145 150 155 160

Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser
 165 170 175

Pro Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn
 180 185 190

Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp
 195 200 205

Lys Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr
 210 215 220

Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
 225 230 235

A-2063-WO-PCT_SeqList_ST25-092817

<210> 179
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 179
 atggacatga ggggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
 cgctgtgagg tgcagctggt ggagtctggg ggaggcttgg taaagcctgg ggggtccctt 120
 agactctcct gtgcagcctc tggattcact ttcagtaacg cctggatgag ctgggtccgc 180
 caggctccag ggaaggggct ggagtgggtt ggccgtatta aaagcaaac tgatgggtggg 240
 acaacagact acactgcacc cgtgaaaggc agattcacca tctcaagaga tgattcaaaa 300
 aacacgctgt atctgcaaat gaatagcctg aaagccgagg acacagccgt gtattactgt 360
 accacagatc ggaccgggta tagcatcagc tgggtctagtt actactacta ctacggtatg 420
 gacgtctggg gccaaaggac cacggtcacc gtctctagtg cctccaccaa gggcccatcg 480
 gtcttcccc tggcgccctg ctccaggagc acctccgaga gcacagcggc cctgggctgc 540
 ctgggtcaagg actacttccc cgaaccggtg acggtgtcgt ggaactcagg cgctctgacc 600
 agcggcgtgc acaccttccc agctgtccta cagtcctcag gactctactc cctcagcagc 660
 gtggtgaccg tgccctccag caacttcggc acccagacct acacctgcaa cgtagatcac 720
 aagcccagca acaccaaggt ggacaagaca gttgagcgca aatgttgtgt cgagtgccca 780
 ccgtgcccag caccacctgt ggcaggaccg tcagtcttcc tcttcccccc aaaacccaag 840
 gacaccctca tgatctccc gaccctgag gtcacgtgcg tgggtggtgga cgtgagccac 900
 gaagacccc aggtccagtt caactggtac gtggacggcg tggaggtgca taatgccaa 960
 acaaagccac gggaggagca gttcaacagc acgttccgtg tggtcagcgt cctcaccgtt 1020
 gtgcaccagg actggctgaa cggcaaggag tacaagtgca aggtctccaa caaaggcctc 1080
 ccagccccc tcgagaaaac catctccaaa accaaagggc agccccgaga accacaggtg 1140
 tacacctgac ccccatccc ggaggagatg accaagaacc aggtcagcct gacctgcctg 1200
 gtcaaaggct tctaccccag cgacatcgcc gtggagtggg agagcaatgg gcagccggag 1260
 aacaactaca agaccacacc tcccatgctg gactccgacg gctccttctt cctctacagc 1320
 aagctcaccg tggacaagag caggtggcag caggggaacg tcttctcatg ctccgtgatg 1380
 catgaggctc tgcacaacca ctacacgcag aagagcctct ccctgtctcc gggtaaa 1437

<210> 180
 <211> 479
 <212> PRT
 <213> Homo sapiens

<400> 180
 Met Asp Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp
 1 5 10 15

Leu Arg Gly Ala Arg Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 Page 184

20

25

30

Leu Val Lys₃₅ Pro Gly Gly Ser Leu₄₀ Arg Leu Ser Cys Ala₄₅ Ala Ser Gly

Phe Thr₅₀ Phe Ser Asn Ala Trp₅₅ Met Ser Trp Val Arg₆₀ Gln Ala Pro Gly

Lys₆₅ Gly Leu Glu Trp Val₇₀ Gly Arg Ile Lys₇₅ Ser Lys Thr Asp Gly₈₀ Gly

Thr Thr Asp Tyr Thr₈₅ Ala Pro Val Lys Gly₉₀ Arg Phe Thr Ile Ser₉₅ Arg

Asp Asp Ser Lys₁₀₀ Asn Thr Leu Tyr Leu₁₀₅ Gln Met Asn Ser Leu₁₁₀ Lys Ala

Glu Asp Thr₁₁₅ Ala Val Tyr Tyr Cys₁₂₀ Thr Thr Asp Arg Thr₁₂₅ Gly Tyr Ser

Ile Ser₁₃₀ Trp Ser Ser Tyr Tyr₁₃₅ Tyr Tyr Tyr Gly Met₁₄₀ Asp Val Trp Gly

Gln Gly Thr Thr Val Thr₁₅₀ Val Ser Ser Ala Ser₁₅₅ Thr Lys Gly Pro Ser₁₆₀

Val Phe Pro Leu Ala₁₆₅ Pro Cys Ser Arg Ser₁₇₀ Thr Ser Glu Ser Thr₁₇₅ Ala

Ala Leu Gly Cys₁₈₀ Leu Val Lys Asp Tyr₁₈₅ Phe Pro Glu Pro Val₁₉₀ Thr Val

Ser Trp Asn₁₉₅ Ser Gly Ala Leu Thr₂₀₀ Ser Gly Val His Thr₂₀₅ Phe Pro Ala

Val Leu₂₁₀ Gln Ser Ser Gly Leu₂₁₅ Tyr Ser Leu Ser Ser₂₂₀ Val Val Thr Val

Pro₂₂₅ Ser Ser Asn Phe Gly₂₃₀ Thr Gln Thr Tyr Thr₂₃₅ Cys Asn Val Asp His₂₄₀

Lys Pro Ser Asn Thr₂₄₅ Lys Val Asp Lys Thr₂₅₀ Val Glu Arg Lys Cys₂₅₅ Cys

Val Glu Cys Pro₂₆₀ Pro Cys Pro Ala Pro₂₆₅ Pro Val Ala Gly Pro₂₇₀ Ser Val

Phe Leu Phe₂₇₅ Pro Pro Lys Pro Lys₂₈₀ Asp Thr Leu Met Ile₂₈₅ Ser Arg Thr

Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu

290

295

300

Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
 305 310 315 320

Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser
 325 330 335

Val Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
 340 345 350

Cys Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile
 355 360 365

Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
 370 375 380

Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
 385 390 395 400

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

Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser
 420 425 430

Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
 435 440 445

Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
 450 455 460

His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470 475

<210> 181
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 181

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

Glu Arg Ala Thr Leu Ser Cys
 20

<210> 182
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 182

A-2063-WO-PCT_SeqList_ST25-092817

Trp Tyr Arg Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
1 5 10 15

<210> 183
<211> 32
<212> PRT
<213> Homo sapiens

<400> 183

Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp Phe Ala Val Tyr Tyr Cys
20 25 30

<210> 184
<211> 10
<212> PRT
<213> Homo sapiens

<400> 184

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
1 5 10

<210> 185
<211> 23
<212> PRT
<213> Homo sapiens

<400> 185

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

Glu Lys Val Thr Ile Thr Cys
20

<210> 186
<211> 15
<212> PRT
<213> Homo sapiens

<400> 186

Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile Lys
1 5 10 15

<210> 187
<211> 32
<212> PRT
<213> Homo sapiens

<400> 187

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

A-2063-WO-PCT_SeqList_ST25-092817

Leu Thr Ile Asn Ser Leu Glu Ala Glu Asp Ala Ala Ala Tyr Tyr Cys
20 25 30

<210> 188
<211> 10
<212> PRT
<213> Homo sapiens

<400> 188

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
1 5 10

<210> 189
<211> 23
<212> PRT
<213> Homo sapiens

<400> 189

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

Gln Pro Ala Ser Ile Ser Cys
20

<210> 190
<211> 15
<212> PRT
<213> Homo sapiens

<400> 190

Trp Leu Gln Gln Arg Pro Gly Gln Pro Pro Arg Leu Leu Ile Tyr
1 5 10 15

<210> 191
<211> 32
<212> PRT
<213> Homo sapiens

<400> 191

Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ala Gly Thr Asp Phe Thr
1 5 10 15

Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Thr Cys
20 25 30

<210> 192
<211> 10
<212> PRT
<213> Homo sapiens

<400> 192

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
1 5 10

<210> 193

<211> 23
 <212> PRT
 <213> Homo sapiens

<400> 193

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

Glu Arg Ala Thr Leu Ser Cys
 20

<210> 194
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 194

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
 1 5 10 15

<210> 195
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 195

Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Phe Tyr Cys
 20 25 30

<210> 196
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 196

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 1 5 10

<210> 197
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 197

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

Asp Arg Ala Thr Leu Ser Cys
 20

<210> 198
 <211> 32

<212> PRT
 <213> Homo sapiens

<400> 198

Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 199
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 199

Trp His Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
 1 5 10 15

<210> 200
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 200

Trp His Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
 1 5 10 15

<210> 201
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 201

Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Thr Val Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 202
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 202

Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
 1 5 10 15

<210> 203
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 203

A-2063-WO-PCT_SeqList_ST25-092817

Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Phe Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
20 25 30

<210> 204
<211> 10
<212> PRT
<213> Homo sapiens

<400> 204

Phe Gly Gln Gly Thr Thr Val Glu Ile Lys
1 5 10

<210> 205
<211> 23
<212> PRT
<213> Homo sapiens

<400> 205

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
20

<210> 206
<211> 15
<212> PRT
<213> Homo sapiens

<400> 206

Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
1 5 10 15

<210> 207
<211> 32
<212> PRT
<213> Homo sapiens

<400> 207

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
20 25 30

<210> 208
<211> 23
<212> PRT
<213> Homo sapiens

<400> 208

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
Page 191

1 5 10 15

Asp Arg Val Thr Ile Thr Cys
20

<210> 209
<211> 32
<212> PRT
<213> Homo sapiens

<400> 209

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Asn Tyr Tyr Cys
20 25 30

<210> 210
<211> 23
<212> PRT
<213> Homo sapiens

<400> 210

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

Glu Arg Ala Thr Ile Asn Cys
20

<210> 211
<211> 15
<212> PRT
<213> Homo sapiens

<400> 211

Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr
1 5 10 15

<210> 212
<211> 32
<212> PRT
<213> Homo sapiens

<400> 212

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys
20 25 30

<210> 213
<211> 32
<212> PRT
<213> Homo sapiens

<400> 213

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ala Gly Thr Asp Phe Thr
 1 5 10 15

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

<210> 214

<211> 10

<212> PRT

<213> Homo sapiens

<400> 214

Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 1 5 10

<210> 215

<211> 23

<212> PRT

<213> Homo sapiens

<400> 215

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

Glu Arg Ala Thr Ile Asn Cys
 20

<210> 216

<211> 32

<212> PRT

<213> Homo sapiens

<400> 216

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Val Tyr Tyr Cys
 20 25 30

<210> 217

<211> 10

<212> PRT

<213> Homo sapiens

<400> 217

Phe Gly Gln Gly Thr Arg Val Glu Ile Lys
 1 5 10

<210> 218

<211> 23

<212> PRT

<213> Homo sapiens

<400> 218

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

Asp Arg Val Thr Met Ser Cys
20

<210> 219
<211> 32
<212> PRT
<213> Homo sapiens
<400> 219

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys
20 25 30

<210> 220
<211> 10
<212> PRT
<213> Homo sapiens
<400> 220

Phe Gly Gly Gly Thr Lys Val Gln Ile Lys
1 5 10

<210> 221
<211> 32
<212> PRT
<213> Homo sapiens
<400> 221

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Phe Cys
20 25 30

<210> 222
<211> 15
<212> PRT
<213> Homo sapiens
<400> 222

Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
1 5 10 15

<210> 223
<211> 32
<212> PRT
<213> Homo sapiens
<400> 223

A-2063-WO-PCT_SeqList_ST25-092817

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr
1 5 10 15

Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Val Thr Tyr Tyr Cys
20 25 30

<210> 224
<211> 23
<212> PRT
<213> Homo sapiens

<400> 224

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

Glu Pro Ala Ser Ile Ser Cys
20

<210> 225
<211> 15
<212> PRT
<213> Homo sapiens

<400> 225

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr
1 5 10 15

<210> 226
<211> 32
<212> PRT
<213> Homo sapiens

<400> 226

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15

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

<210> 227
<211> 23
<212> PRT
<213> Homo sapiens

<400> 227

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

Glu Pro Ala Ser Ile Ser Cys
20

<210> 228
<211> 32
<212> PRT
<213> Homo sapiens

<400> 228

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr His Leu Thr
 1 5 10 15

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

<210> 229

<211> 15

<212> PRT

<213> Homo sapiens

<400> 229

Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser Leu Ile Tyr
 1 5 10 15

<210> 230

<211> 10

<212> PRT

<213> Homo sapiens

<400> 230

Phe Gly Gln Gly Thr Lys Leu Glu Ile Ser
 1 5 10

<210> 231

<211> 10

<212> PRT

<213> Homo sapiens

<400> 231

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 1 5 10

<210> 232

<211> 15

<212> PRT

<213> Homo sapiens

<400> 232

Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Tyr
 1 5 10 15

<210> 233

<211> 32

<212> PRT

<213> Homo sapiens

<400> 233

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 234
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 234

Gly Ile Pro Ala Arg Val Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr
 1 5 10 15

Leu Thr Ile Ser Ser Leu Gln Ser Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 235
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 235

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

Gln Pro Ala Ser Ile Ser Cys
 20

<210> 236
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 236

Trp Tyr Leu Gln Arg Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr
 1 5 10 15

<210> 237
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 237

Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys
 1 5 10

<210> 238
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 238

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

Glu Arg Ala Thr Leu Ser Cys
 20

<210> 239
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 239

Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 240
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 240

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

Gln Pro Ala Ser Ile Ser Cys
 20

<210> 241
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 241

Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Gln Phe Leu Ile Tyr
 1 5 10 15

<210> 242
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 242

Arg Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1 5 10 15

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

<210> 243
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 243

Phe Gly Gln Gly Thr Gln Val Glu Ile Lys
 1 5 10

A-2063-WO-PCT_SeqList_ST25-092817

<210> 244
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 244

Gly Ile Pro Asp Arg Val Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr
 1 5 10 15

Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
 20 25 30

<210> 245
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 245

Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
 1 5 10 15

<210> 246
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 246

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

Glu Pro Ala Ser Ile Ser Cys
 20

<210> 247
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 247

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

Ser Ile Thr Ile Ser Cys
 20

<210> 248
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 248

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr
 1 5 10 15

<210> 249

<211> 32
 <212> PRT
 <213> Homo sapiens

<400> 249

Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser
 1 5 10 15

Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 250
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 250

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 1 5 10

<210> 251
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 251

Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
 1 5 10 15

Thr Ala Arg Ile Thr Cys
 20

<210> 252
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 252

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr
 1 5 10 15

<210> 253
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 253

Trp Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr
 1 5 10 15

Leu Thr Ile Ser Arg Gly Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 254
 <211> 22

<212> PRT
 <213> Homo sapiens

<400> 254

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 1 5 10 15

Lys Val Thr Ile Ser Cys
 20

<210> 255
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 255

Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
 1 5 10 15

<210> 256
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 256

Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Thr Thr
 1 5 10 15

Leu Gly Ile Thr Gly Leu Gln Thr Gly Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 257
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 257

Gln Ser Val Leu Thr Gln Ser Pro Ser Ala Ser Gly Thr Pro Gly Gln
 1 5 10 15

Arg Val Thr Ile Ser Cys
 20

<210> 258
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 258

Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu Ile Leu
 1 5 10 15

<210> 259
 <211> 32
 <212> PRT

<213> Homo sapiens

<400> 259

Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
 1 5 10 15

Leu Thr Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 260

<211> 22

<212> PRT

<213> Homo sapiens

<400> 260

Ser Tyr Glu Val Thr Gln Ala Pro Ser Val Ser Val Ser Pro Gly Gln
 1 5 10 15

Thr Ala Ser Ile Thr Cys
 20

<210> 261

<211> 15

<212> PRT

<213> Homo sapiens

<400> 261

Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Val Leu Val Ile Tyr
 1 5 10 15

<210> 262

<211> 32

<212> PRT

<213> Homo sapiens

<400> 262

Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr
 1 5 10 15

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

<210> 263

<211> 22

<212> PRT

<213> Homo sapiens

<400> 263

Cys Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln
 1 5 10 15

Thr Ala Thr Ile Thr Cys
 20

<210> 264
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 264

Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Val Leu Val Ile Tyr
 1 5 10 15

<210> 265
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 265

Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr
 1 5 10 15

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

<210> 266
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 266

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

Thr Val Lys Ile Thr Cys
 20

<210> 267
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 267

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Phe Tyr
 1 5 10 15

<210> 268
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 268

Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser
 1 5 10 15

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
 20 25 30

<210> 269

<211> 10
 <212> PRT
 <213> Homo sapiens
 <400> 269

Leu Gly Gly Gly Thr Lys Leu Thr Val Leu
 1 5 10

<210> 270
 <211> 22
 <212> PRT
 <213> Homo sapiens
 <400> 270

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

Thr Val Ala Ile Ser Cys
 20

<210> 271
 <211> 15
 <212> PRT
 <213> Homo sapiens
 <400> 271

Trp Tyr Gln Gln Arg Pro Gly Ser Ser Pro Thr Thr Val Ile Phe
 1 5 10 15

<210> 272
 <211> 34
 <212> PRT
 <213> Homo sapiens
 <400> 272

Gly Val Pro Asp Arg Phe Ser Gly Ser Ile Asp Ser Ser Ser Asn Ser
 1 5 10 15

Ala Ser Leu Thr Ile Ser Gly Leu Lys Thr Glu Asp Glu Ala Asp Tyr
 20 25 30

Tyr Cys

<210> 273
 <211> 30
 <212> PRT
 <213> Homo sapiens
 <400> 273

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser
 20 25 30

<210> 274
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 274

Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 1 5 10

<210> 275
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 275

Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys
 1 5 10 15

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

<210> 276
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 276

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

<210> 277
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 277

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

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Ser
 20 25 30

<210> 278
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 278

Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly
 1 5 10

<210> 279
 <211> 32
 <212> PRT

<213> Homo sapiens

<400> 279

Gln Val Thr Ile Ser Ala Asp Asn Ser Asn Ser Ala Thr Tyr Leu Gln
 1 5 10 15

Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Phe Cys Ala Arg
 20 25 30

<210> 280

<211> 30

<212> PRT

<213> Homo sapiens

<400> 280

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

Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser
 20 25 30

<210> 281

<211> 14

<212> PRT

<213> Homo sapiens

<400> 281

Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu Trp Leu Ala
 1 5 10

<210> 282

<211> 32

<212> PRT

<213> Homo sapiens

<400> 282

Arg Leu Thr Ile Ser Lys Asp Thr Ser Lys Ser Gln Val Val Leu Thr
 1 5 10 15

Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
 20 25 30

<210> 283

<211> 11

<212> PRT

<213> Homo sapiens

<400> 283

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
 1 5 10

<210> 284

<211> 30

<212> PRT

<213> Homo sapiens

<400> 284

Glu 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 Thr Leu Thr
 20 25 30

<210> 285

<211> 14

<212> PRT

<213> Homo sapiens

<400> 285

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

<210> 286

<211> 32

<212> PRT

<213> Homo sapiens

<400> 286

Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser Thr Ala Tyr Met Glu
 1 5 10 15

Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 287

<211> 11

<212> PRT

<213> Homo sapiens

<400> 287

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
 1 5 10

<210> 288

<211> 30

<212> PRT

<213> Homo sapiens

<400> 288

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

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

<210> 289

<211> 14

<212> PRT

<213> Homo sapiens

<400> 289

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala
 1 5 10

<210> 290

<211> 32

<212> PRT

<213> Homo sapiens

<400> 290

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

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 291

<211> 30

<212> PRT

<213> Homo sapiens

<400> 291

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

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

<210> 292

<211> 14

<212> PRT

<213> Homo sapiens

<400> 292

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
 1 5 10

<210> 293

<211> 32

<212> PRT

<213> Homo sapiens

<400> 293

Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 20 25 30

<210> 294

<211> 30

<212> PRT

<213> Homo sapiens

<400> 294

A-2063-WO-PCT_SeqList_ST25-092817

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr
20 25 30

<210> 295
<211> 32
<212> PRT
<213> Homo sapiens
<400> 295

Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
1 5 10 15

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

<210> 296
<211> 30
<212> PRT
<213> Homo sapiens
<400> 296

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 Thr Leu Ser
20 25 30

<210> 297
<211> 14
<212> PRT
<213> Homo sapiens
<400> 297

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met Gly
1 5 10

<210> 298
<211> 32
<212> PRT
<213> Homo sapiens
<400> 298

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

Leu Ser Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
20 25 30

<210> 299
<211> 30
<212> PRT

<213> Homo sapiens

<400> 299

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 Thr Phe Thr
 20 25 30

<210> 300

<211> 30

<212> PRT

<213> Homo sapiens

<400> 300

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 Ser Ser Gly Tyr Thr Phe Thr
 20 25 30

<210> 301

<211> 32

<212> PRT

<213> Homo sapiens

<400> 301

Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu
 1 5 10 15

Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 302

<211> 30

<212> PRT

<213> Homo sapiens

<400> 302

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

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

<210> 303

<211> 33

<212> PRT

<213> Homo sapiens

<400> 303

Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

A-2063-WO-PCT_SeqList_ST25-092817

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

Gly

<210> 304
<211> 30
<212> PRT
<213> Homo sapiens

<400> 304

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

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

<210> 305
<211> 32
<212> PRT
<213> Homo sapiens

<400> 305

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

<210> 306
<211> 32
<212> PRT
<213> Homo sapiens

<400> 306

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

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

<210> 307
<211> 30
<212> PRT
<213> Homo sapiens

<400> 307

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
20 25 30

<210> 308
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 308

Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile Gly
 1 5 10

<210> 309
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 309

Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr Met Glu
 1 5 10 15

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Phe Tyr Phe Cys Ala Arg
 20 25 30

<210> 310
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 310

Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Arg Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 311
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 311

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gly
 1 5 10 15

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

<210> 312
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 312

Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 1 5 10

<210> 313

<211> 32
 <212> PRT
 <213> Homo sapiens

<400> 313

Arg Val Thr Ile Ser Val Asp Lys Ser Lys Asn Gln Phe Ser Leu Lys
 1 5 10 15

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 314
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 314

Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Phe Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 315
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 315

Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 316
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 316

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15

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

<210> 317
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 317

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly
 1 5 10

<210> 318
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 318

Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Thr Thr
 20 25 30

<210> 319
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 319

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 Gly Ser Ile Ser
 20 25 30

<210> 320
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 320

Trp Ile Arg Gln Leu Pro Gly Lys Gly Leu Glu Trp Ile Gly
 1 5 10

<210> 321
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 321

Arg Val Thr Ile Ser Val Asp Thr Ser Lys Lys Gln Phe Ser Leu Arg
 1 5 10 15

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 322
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 322

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Val Ser Gly Tyr Phe Phe Thr
 20 25 30

<210> 323
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 323

Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Tyr Met Gly
 1 5 10

<210> 324
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 324

Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr Leu Gln
 1 5 10 15

Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Arg
 20 25 30

<210> 325
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 325

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

Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys Ala Arg
 20 25 30

<210> 326
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 326

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

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

<210> 327
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 327

A-2063-WO-PCT_SeqList_ST25-092817

Glu 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 Thr Phe Thr
20 25 30

<210> 328
<211> 32
<212> PRT
<213> Homo sapiens

<400> 328

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

Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

<210> 329
<211> 30
<212> PRT
<213> Homo sapiens

<400> 329

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Asn Phe Thr
20 25 30

<210> 330
<211> 14
<212> PRT
<213> Homo sapiens

<400> 330

Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Leu Met Gly
1 5 10

<210> 331
<211> 32
<212> PRT
<213> Homo sapiens

<400> 331

Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr Leu Gln
1 5 10 15

Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Gly Ser
20 25 30

<210> 332
<211> 11
<212> PRT
<213> Homo sapiens

<400> 332

Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

<210> 333

<211> 30

<212> PRT

<213> Homo sapiens

<400> 333

Gln Val Thr Leu Lys Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln
 1 5 10 15

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

<210> 334

<211> 32

<212> PRT

<213> Homo sapiens

<400> 334

Gln Leu Thr Ile Ser Lys Asp Thr Ser Lys Asn Gln Val Val Leu Thr
 1 5 10 15

Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr Cys Ala Arg
 20 25 30

<210> 335

<211> 30

<212> PRT

<213> Homo sapiens

<400> 335

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser
 20 25 30

<210> 336

<211> 14

<212> PRT

<213> Homo sapiens

<400> 336

Trp Ile Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile Gly
 1 5 10

<210> 337

<211> 32

<212> PRT

<213> Homo sapiens

<400> 337

Arg Leu Thr Ile Ser Ile Asp Thr Ser Lys Thr Gln Phe Ser Leu Lys
 1 5 10 15

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

<210> 338

<211> 32

<212> PRT

<213> Homo sapiens

<400> 338

Arg Phe Ile Ile Ser Arg Asp Lys Ser Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 339

<211> 32

<212> PRT

<213> Homo sapiens

<400> 339

Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr Met Glu
 1 5 10 15

Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys Ala Arg
 20 25 30

<210> 340

<211> 30

<212> PRT

<213> Homo sapiens

<400> 340

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

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

<210> 341

<211> 32

<212> PRT

<213> Homo sapiens

<400> 341

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 342
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 342

Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Val Ala
 1 5 10

<210> 343
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 343

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

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

<210> 344
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 344

Gln Val Gln Leu Val Gln Ser Gly Ala Ala Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
 20 25 30

<210> 345
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 345

Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Ser Met Glu
 1 5 10 15

Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys Ala Arg
 20 25 30

<210> 346
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 346

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1 5 10 15

A-2063-WO-PCT_SeqList_ST25-092817

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Thr Glu
20 25 30

<210> 347
<211> 30
<212> PRT
<213> Homo sapiens

<400> 347

Gln Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Met Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
20 25 30

<210> 348
<211> 32
<212> PRT
<213> Homo sapiens

<400> 348

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Asn Thr Val Tyr Met Glu
1 5 10 15

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala Arg
20 25 30

<210> 349
<211> 32
<212> PRT
<213> Homo sapiens

<400> 349

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
1 5 10 15

Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
20 25 30

<210> 350
<211> 441
<212> PRT
<213> Homo sapiens

<400> 350

Glu 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 Thr Leu Thr Ser Tyr
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

A-2063-WO-PCT_SeqList_ST25-092817

Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60
 Gln Gly Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110
 Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
 115 120 125
 Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
 130 135 140
 Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 145 150 155 160
 Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 165 170 175
 Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
 180 185 190
 Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
 195 200 205
 Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
 210 215 220
 Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 225 230 235 240
 Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 245 250 255
 Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 260 265 270
 Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 275 280 285
 Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
 290 295 300
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 305 310 315 320

A-2063-WO-PCT_SeqList_ST25-092817

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
325 330 335

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
340 345 350

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
355 360 365

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
370 375 380

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
385 390 395 400

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
405 410 415

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
420 425 430

Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440

<210> 351
<211> 215
<212> PRT
<213> Homo sapiens

<400> 351

Glu Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

Asn Ser Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
35 40 45

Met Ile Tyr Glu Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Tyr Thr Ser Thr
85 90 95

Ser Met Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro
100 105 110

A-2063-WO-PCT_SeqList_ST25-092817

Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu
115 120 125

Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro
130 135 140

Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala
145 150 155 160

Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala
165 170 175

Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Arg
180 185 190

Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys Thr
195 200 205

Val Ala Pro Thr Glu Cys Ser
210 215

<210> 352
<211> 441
<212> PRT
<213> Homo sapiens

<400> 352

Glu 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 Thr Leu Thr Ser Tyr
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Gly Thr Met Thr Arg Asp Pro Ser Thr 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

Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
115 120 125

Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
Page 223

130

135

140

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 145 150 155 160

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 165 170 175

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
 180 185 190

Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
 195 200 205

Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
 210 215 220

Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 225 230 235 240

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 245 250 255

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 260 265 270

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 275 280 285

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
 290 295 300

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 305 310 315 320

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
 325 330 335

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
 340 345 350

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
 355 360 365

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 370 375 380

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
 385 390 395 400

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
 Page 224

405

410

415

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 420 425 430

Lys Ser Leu Ser Leu Ser Pro Gly Lys
 435 440

<210> 353
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 353

Glu 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 Thr Leu Thr Ser Tyr
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
 115 120 125

Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
 130 135 140

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 145 150 155 160

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 165 170 175

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
 180 185 190

Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
 195 200 205

Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
 210 215 220
 Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 225 230 235 240
 Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 245 250 255
 Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 260 265 270
 Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
 275 280 285
 Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
 290 295 300
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
 305 310 315 320
 Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
 325 330 335
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
 340 345 350
 Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
 355 360 365
 Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
 370 375 380
 Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
 385 390 395 400
 Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
 405 410 415
 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
 420 425 430
 Lys Lys Leu Ser Leu Ser Pro Gly Lys
 435 440

<210> 354
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 354

A-2063-WO-PCT_SeqList_ST25-092817

Glu 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 Thr Leu Thr Ser Tyr
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60
 Gln Gly Arg Gly Thr Met Thr Arg Asp Pro Ser Thr 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
 Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110
 Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
 115 120 125
 Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
 130 135 140
 Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 145 150 155 160
 Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 165 170 175
 Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
 180 185 190
 Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
 195 200 205
 Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
 210 215 220
 Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 225 230 235 240
 Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 245 250 255
 Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
 260 265 270

A-2063-WO-PCT_SeqList_ST25-092817

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
275 280 285

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
290 295 300

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
305 310 315 320

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
325 330 335

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
340 345 350

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
355 360 365

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
370 375 380

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
385 390 395 400

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
405 410 415

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
420 425 430

Lys Lys Leu Ser Leu Ser Pro Gly Lys
435 440

<210> 355
<211> 220
<212> PRT
<213> Homo sapiens

<400> 355

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Asp Ser
20 25 30

Ser Asp Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Asn Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Ser Asp Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile
100 105 110

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
115 120 125

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
130 135 140

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
145 150 155 160

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
165 170 175

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
180 185 190

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
195 200 205

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215 220

<210> 356
<211> 446
<212> PRT
<213> Homo sapiens

<400> 356

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 Thr Phe Thr Ser Tyr
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
Page 229

Ala Arg Glu Ser Trp Phe Gly Glu Val Phe Phe Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
180 185 190

Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys
195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val
210 215 220

Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe
225 230 235 240

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
245 250 255

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
260 265 270

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val
290 295 300

Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305 310 315 320

Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
325 330 335

Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
340 345 350

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val

355

360

365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
 370 375 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp
 385 390 395 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
 405 410 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
 420 425 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 435 440 445

<210> 357
 <211> 446
 <212> PRT
 <213> Homo sapiens

<400> 357

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 Thr Phe Thr Ser Tyr
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr 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

Ala Arg Glu Ser Trp Phe Gly Glu Val Phe Phe Asp Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160

A-2063-WO-PCT_SeqList_ST25-092817

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
180 185 190

Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys
195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val
210 215 220

Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe
225 230 235 240

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
245 250 255

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
260 265 270

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val
290 295 300

Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305 310 315 320

Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
325 330 335

Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
340 345 350

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
355 360 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
370 375 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp
385 390 395 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
405 410 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
420 425 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 435 440 445

<210> 358
 <211> 446
 <212> PRT
 <213> Homo sapiens

<400> 358

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 Thr Phe Thr Ser Tyr
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Lys Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr 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

Ala Arg Glu Ser Trp Phe Gly Glu Val Phe Phe Asp Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125

Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala
 130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190

Ser Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys
 195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val
 210 215 220

A-2063-WO-PCT_SeqList_ST25-092817

Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe
225 230 235 240

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
245 250 255

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
260 265 270

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
275 280 285

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val
290 295 300

Leu Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
305 310 315 320

Lys Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
325 330 335

Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
340 345 350

Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
355 360 365

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
370 375 380

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp
385 390 395 400

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
405 410 415

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
420 425 430

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
435 440 445

<210> 359
<211> 450
<212> PRT
<213> Homo sapiens

<400> 359

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

A-2063-WO-PCT_SeqList_ST25-092817

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Val
35 40 45

Ala Ala Ile Trp Phe Asp Ala Ser Asp Lys Tyr Tyr Ala Asp Ala Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Gln Ala Ile Phe Gly Val Val Pro Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
180 185 190

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
210 215 220

Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
225 230 235 240

Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
245 250 255

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
260 265 270

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
275 280 285

A-2063-WO-PCT_SeqList_ST25-092817

Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln Tyr Gly Ser Thr Tyr Arg
290 295 300

Cys Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
305 310 315 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
325 330 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
340 345 350

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
355 360 365

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
370 375 380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
385 390 395 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
420 425 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
435 440 445

Gly Lys
450

<210> 360
<211> 214
<212> PRT
<213> Homo sapiens

<400> 360

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro Ala Arg Val Ser Gly
50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
Page 236

65					70					75					80
Glu	Asp	Phe	Ala	Val ₈₅	Tyr	Tyr	Cys	Gln	Gln ₉₀	Tyr	Asn	Asn	Trp	Pro ₉₅	Leu
Thr	Phe	Gly	Gly ₁₀₀	Gly	Thr	Lys	Val	Glu ₁₀₅	Ile	Lys	Arg	Thr	Val ₁₁₀	Ala	Ala
Pro	Ser	Val ₁₁₅	Phe	Ile	Phe	Pro	Pro ₁₂₀	Ser	Asp	Glu	Gln	Leu ₁₂₅	Lys	Ser	Gly
Thr	Ala ₁₃₀	Ser	Val	Val	Cys	Leu ₁₃₅	Leu	Asn	Asn	Phe	Tyr ₁₄₀	Pro	Arg	Glu	Ala
Lys ₁₄₅	Val	Gln	Trp	Lys	Val ₁₅₀	Asp	Asn	Ala	Leu	Gln ₁₅₅	Ser	Gly	Asn	Ser	Gln ₁₆₀
Glu	Ser	Val	Thr	Glu ₁₆₅	Gln	Asp	Ser	Lys	Asp ₁₇₀	Ser	Thr	Tyr	Ser	Leu ₁₇₅	Ser
Ser	Thr	Leu	Thr ₁₈₀	Leu	Ser	Lys	Ala	Asp ₁₈₅	Tyr	Glu	Lys	His	Lys ₁₉₀	Val	Tyr
Ala	Cys	Glu ₁₉₅	Val	Thr	His	Gln	Gly ₂₀₀	Leu	Ser	Ser	Pro	Val ₂₀₅	Thr	Lys	Ser
Phe	Asn ₂₁₀	Arg	Gly	Glu	Cys										

<210>	361
<211>	450
<212>	PRT
<213>	Homo sapiens

<400> 361

Glu 1	Val	Gln	Leu	Val 5	Glu	Ser	Gly	Gly	Gly 10	Val	Val	Gln	Pro	Gly 15	Gly
Ser	Leu	Arg	Leu 20	Ser	Cys	Ala	Ala	Ser 25	Gly	Phe	Thr	Phe	Ser 30	Asn	Tyr
Gly	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Glu	Gly	Leu 45	Glu	Trp	Val
Ala	Ala 50	Ile	Trp	Phe	Asp	Ala 55	Ser	Asp	Lys	Tyr	Tyr 60	Ala	Asp	Ala	Val
Lys 65	Gly	Arg	Phe	Thr	Ile 70	Ser	Arg	Asp	Asn	Ala 75	Lys	Asn	Thr	Leu	Tyr 80
Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys

A-2063-WO-PCT_SeqList_ST25-092817

Ala Arg Asp Gln Ala Ile Phe Gly Val Val Pro Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
180 185 190

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
210 215 220

Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
225 230 235 240

Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
245 250 255

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
260 265 270

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
275 280 285

Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln Tyr Gly Ser Thr Tyr Arg
290 295 300

Cys Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
305 310 315 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
325 330 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
340 345 350

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
355 360 365

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
370 375 380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
385 390 395 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
420 425 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
435 440 445

Gly Lys
450

<210> 362
<211> 450
<212> PRT
<213> Homo sapiens

<400> 362

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Val
35 40 45

Ala Ala Ile Trp Phe Asp Ala Ser Asp Lys Tyr Tyr Ala Asp Ala Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Gln Ala Ile Phe Gly Val Val Pro Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
130 135 140

A-2063-WO-PCT_SeqList_ST25-092817

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190
 Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 195 200 205
 Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
 210 215 220
 Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
 225 230 235 240
 Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 245 250 255
 Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
 260 265 270
 Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
 275 280 285
 Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln Tyr Gly Ser Thr Tyr Arg
 290 295 300
 Cys Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
 305 310 315 320
 Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
 325 330 335
 Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 340 345 350
 Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
 355 360 365
 Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
 370 375 380
 Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
 385 390 395 400
 Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
 405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
 420 425 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
 435 440 445

Gly Lys
 450

<210> 363
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 363

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35 40 45

Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro Asp Arg Val Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro
 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

<210> 364
 <211> 450
 <212> PRT
 <213> Homo sapiens
 <400> 364

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Val
 35 40 45

Ala Ala Ile Trp Phe Asp Ala Ser Asp Lys Tyr Tyr Ala Asp Ala Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Gln Ala Ile Phe Gly Val Val Pro Asp Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
 130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
 Page 242

210

215

220

Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
 225 230 235 240

Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 245 250 255

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
 260 265 270

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
 275 280 285

Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln Tyr Gly Ser Thr Tyr Arg
 290 295 300

Cys Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
 305 310 315 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
 325 330 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 340 345 350

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
 355 360 365

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
 370 375 380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
 385 390 395 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
 405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
 420 425 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
 435 440 445

Gly Lys
 450

<210> 365
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 365

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35 40 45

Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro Asp Arg Val Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro
 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
 100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
 115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
 130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
 145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
 165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
 180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
 195 200 205

Phe Asn Arg Gly Glu Cys
 210

<210> 366

<211> 441

<212> PRT

<213> Homo sapiens

<400> 366

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

A-2063-WO-PCT_SeqList_ST25-092817

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Leu Thr Ser Tyr
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
115 120 125

Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
130 135 140

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
145 150 155 160

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
165 170 175

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
180 185 190

Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
195 200 205

Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
210 215 220

Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
225 230 235 240

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
245 250 255

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
260 265 270

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
275 280 285

A-2063-WO-PCT_SeqList_ST25-092817

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
290 295 300

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
305 310 315 320

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
325 330 335

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
340 345 350

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
355 360 365

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
370 375 380

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
385 390 395 400

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
405 410 415

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
420 425 430

Lys Lys Leu Ser Leu Ser Pro Gly Lys
435 440

<210> 367
<211> 214
<212> PRT
<213> Homo sapiens

<400> 367

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Gly Ala Ala Thr Arg Ala Thr Gly Ile Pro Ala Arg Val Ser Gly
50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly
115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala
130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln
145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser
165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr
180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser
195 200 205

Phe Asn Arg Gly Glu Cys
210

<210> 368
<211> 450
<212> PRT
<213> Homo sapiens

<400> 368

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Val
35 40 45

Ala Ala Ile Trp Phe Asp Ala Ser Asp Lys Tyr Tyr Ala Asp Ala Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Gln Ala Ile Phe Gly Val Val Pro Asp Tyr Trp Gly Gln
Page 247

100

105

110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
 130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
 210 215 220

Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
 225 230 235 240

Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 245 250 255

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
 260 265 270

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
 275 280 285

Asn Ala Lys Thr Lys Pro Cys Glu Glu Gln Tyr Gly Ser Thr Tyr Arg
 290 295 300

Cys Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
 305 310 315 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
 325 330 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 340 345 350

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
 355 360 365

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp

370

375

380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
 385 390 395 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
 405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
 420 425 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Lys Leu Ser Leu Ser Pro
 435 440 445

Gly Lys
 450

<210> 369
 <211> 692
 <212> PRT
 <213> Homo sapiens

<400> 369

Met Gly Thr Val Ser Ser Arg Arg Ser Trp Trp Pro Leu Pro Leu Leu
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Gly Pro Ala Gly Ala Arg Ala Gln Glu
 20 25 30

Asp Glu Asp Gly Asp Tyr Glu Glu Leu Val Leu Ala Leu Arg Ser Glu
 35 40 45

Glu Asp Gly Leu Ala Glu Ala Pro Glu His Gly Thr Thr Ala Thr Phe
 50 55 60

His Arg Cys Ala Lys Asp Pro Trp Arg Leu Pro Gly Thr Tyr Val Val
 65 70 75 80

Val Leu Lys Glu Glu Thr His Leu Ser Gln Ser Glu Arg Thr Ala Arg
 85 90 95

Arg Leu Gln Ala Gln Ala Ala Arg Arg Gly Tyr Leu Thr Lys Ile Leu
 100 105 110

His Val Phe His Gly Leu Leu Pro Gly Phe Leu Val Lys Met Ser Gly
 115 120 125

Asp Leu Leu Glu Leu Ala Leu Lys Leu Pro His Val Asp Tyr Ile Glu
 130 135 140

Glu Asp Ser Ser Val Phe Ala Gln Ser Ile Pro Trp Asn Leu Glu Arg
 145 150 155 160

A-2063-WO-PCT_SeqList_ST25-092817

Ile Thr Pro Pro Arg Tyr Arg Ala Asp Glu Tyr Gln Pro Pro Asp Gly
165 170 175

Gly Ser Leu Val Glu Val Tyr Leu Leu Asp Thr Ser Ile Gln Ser Asp
180 185 190

His Arg Glu Ile Glu Gly Arg Val Met Val Thr Asp Phe Glu Asn Val
195 200 205

Pro Glu Glu Asp Gly Thr Arg Phe His Arg Gln Ala Ser Lys Cys Asp
210 215 220

Ser His Gly Thr His Leu Ala Gly Val Val Ser Gly Arg Asp Ala Gly
225 230 235 240

Val Ala Lys Gly Ala Ser Met Arg Ser Leu Arg Val Leu Asn Cys Gln
245 250 255

Gly Lys Gly Thr Val Ser Gly Thr Leu Ile Gly Leu Glu Phe Ile Arg
260 265 270

Lys Ser Gln Leu Val Gln Pro Val Gly Pro Leu Val Val Leu Leu Pro
275 280 285

Leu Ala Gly Gly Tyr Ser Arg Val Leu Asn Ala Ala Cys Gln Arg Leu
290 295 300

Ala Arg Ala Gly Val Val Leu Val Thr Ala Ala Gly Asn Phe Arg Asp
305 310 315 320

Asp Ala Cys Leu Tyr Ser Pro Ala Ser Ala Pro Glu Val Ile Thr Val
325 330 335

Gly Ala Thr Asn Ala Gln Asp Gln Pro Val Thr Leu Gly Thr Leu Gly
340 345 350

Thr Asn Phe Gly Arg Cys Val Asp Leu Phe Ala Pro Gly Glu Asp Ile
355 360 365

Ile Gly Ala Ser Ser Asp Cys Ser Thr Cys Phe Val Ser Gln Ser Gly
370 375 380

Thr Ser Gln Ala Ala Ala His Val Ala Gly Ile Ala Ala Met Met Leu
385 390 395 400

Ser Ala Glu Pro Glu Leu Thr Leu Ala Glu Leu Arg Gln Arg Leu Ile
405 410 415

His Phe Ser Ala Lys Asp Val Ile Asn Glu Ala Trp Phe Pro Glu Asp
420 425 430

Gln Arg Val₄₃₅ Leu Thr Pro Asn₄₄₀ Leu Val Ala Ala Leu₄₄₅ Pro Pro Ser Thr
 His Gly₄₅₀ Ala Gly Trp Gln₄₅₅ Phe Cys Arg Thr Val₄₆₀ Trp Ser Ala His
 Ser Gly₄₆₅ Pro Thr Arg Met₄₇₀ Ala Thr Ala Ile Ala₄₇₅ Arg Cys Ala Pro Asp₄₈₀
 Glu Glu Leu Leu Ser₄₈₅ Cys Ser Ser Phe Ser₄₉₀ Arg Ser Gly Lys Arg₄₉₅ Arg
 Gly Glu Arg Met₅₀₀ Glu Ala Gln Gly₅₀₅ Lys Leu Val Cys Arg₅₁₀ Ala His
 Asn Ala Phe₅₁₅ Gly Gly Glu Gly Val₅₂₀ Tyr Ala Ile Ala Arg₅₂₅ Cys Cys Leu
 Leu Pro₅₃₀ Gln Ala Asn Cys Ser₅₃₅ Val His Thr Ala Pro₅₄₀ Pro Ala Glu Ala
 Ser Met Gly Thr Arg Val₅₅₀ His Cys His Gln Gln₅₅₅ Gly His Val Leu Thr₅₆₀
 Gly Cys Ser Ser His₅₆₅ Trp Glu Val Glu Asp₅₇₀ Leu Gly Thr His Lys₅₇₅ Pro
 Pro Val Leu Arg₅₈₀ Pro Arg Gly Gln Pro₅₈₅ Asn Gln Cys Val Gly₅₉₀ His Arg
 Glu Ala Ser₅₉₅ Ile His Ala Ser Cys₆₀₀ Cys His Ala Pro Gly₆₀₅ Leu Glu Cys
 Lys Val₆₁₀ Lys Glu His Gly Ile₆₁₅ Pro Ala Pro Gln Gly₆₂₀ Gln Val Thr Val
 Ala Cys Glu Glu Gly Trp₆₃₀ Thr Leu Thr Gly Cys₆₃₅ Ser Ala Leu Pro Gly₆₄₀
 Thr Ser His Val₆₄₅ Leu Gly Ala Tyr Ala Val₆₅₀ Asp Asn Thr Cys Val₆₅₅ Val
 Arg Ser Arg Asp₆₆₀ Val Ser Thr Thr Gly₆₆₅ Ser Thr Ser Glu Glu₆₇₀ Ala Val
 Thr Ala Val₆₇₅ Ala Ile Cys Cys Arg₆₈₀ Ser Arg His Leu Ala Gln Ala Ser
 Gln Glu Leu Gln
 690

<210> 370
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 370

Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Ser Val Ser
 1 5 10

<210> 371
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 371

Glu Val Ser Asn Arg Pro Ser
 1 5

<210> 372
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 372

Asn Ser Tyr Thr Ser Thr Ser Met Val
 1 5

<210> 373
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 373

Gly Tyr Thr Leu Thr Ser Tyr Gly Ile Ser
 1 5 10

<210> 374
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 374

Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu Gln
 1 5 10 15

<210> 375
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 375

Gly Tyr Gly Met Asp Val
 1 5

<210> 376
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 376

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 Thr Leu Thr Ser Tyr
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser
 115

<210> 377
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 377

Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

Asn Ser Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45

Met Ile Tyr Glu Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Tyr Thr Ser Thr
 85 90 95

Ser Met Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 378
<211> 115
<212> PRT
<213> Homo sapiens

<400> 378

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 Thr Leu Thr Ser Tyr
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Val Ser Phe Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Gly Thr Met Thr Thr Asp Pro Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 379
<211> 109
<212> PRT
<213> Homo sapiens

<400> 379

Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln
1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
20 25 30

Asn Ser Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
35 40 45

Met Ile Tyr Glu Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
50 55 60

A-2063-WO-PCT_SeqList_ST25-092817

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Tyr Thr Ser Thr
85 90 95

Ser Met Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105