A1472PCT
SEQUENCE LISTING

<110> AMGEN INC.

<120> HUMAN CGRP RECEPTOR BINDING PROTEINS

<130> A-1472-WO-PCT

<140>
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<150> 61/264,622
<151> 2009-11-25

<150> 61/203,569
<151> 2008-12-23

<160> 261

<170> PatentIn version 3.5

<210> 1
<211> 1419
<212> DNA
<213> Homo sapiens

<400> 1
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gactcaattc agttgggagt tactagaaat aaaatcatga cagctcaata tgaatgttac 180

caaaagatta tgcaagaccc cattcaacaa gcagaaggcg tttactgcaa cagaacctgg 240

gatggatggc tctgctggaa cgatgttgca gcaggaactg aatcaatgca gctctgccct 300

gattactttc aggactttga tccatcagaa aaagttacaa agatctgtga ccaagatgga 360

aactggttta gacatccagc aagcaacaga acatggacaa attataccca gtgtaatgtt 420

aacacccacg agaaagtgaa gactgcacta aatttgtttt acctgaccat aattggacac 480

ggattgtcta ttgcatcact gcttatctcg cttggcatat tcttttattt caagagccta 540

agttgccaaa ggattacctt acacaaaaat ctgttcttct catttgtttg taactctgtt 600

gtaacaatca ttcacctcac tgcagtggcc aacaaccagg ccttagtagc cacaaatcct 660

gttagttgca aagtgtccca gttcattcat ctttacctga tgggctgtaa ttacttttgg 720

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caacatttaa tgtggtatta ttttcttggc tggggatttc cactgattcc tgcttgtata 840

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ttaaatattg tacgcgttct catcaccaag ttaaaagtta cacaccaagc ggaatccaat 1020

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gtgctgattc catggcgacc tgaaggaaag attgcagagg aggtatatga ctacatcatg 1140

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<210> 2
<211> 472
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<213> Homo sapiens

<400> 2

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Thr Leu Tyr Phe Leu Val Leu Leu Pro Phe Phe Met Ile Leu Val Thr
20 25 30

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

Arg Asn Lys Ile Met Thr Ala Gln Tyr Glu Cys Tyr Gln Lys Ile Met
50 55 60

Gln Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr Cys Asn Arg Thr Trp
65 70 75 80

Asp Gly Trp Leu Cys Trp Asn Asp Val Ala Ala Gly Thr Glu Ser Met
85 90 95

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

Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe Arg His Pro Ala Ser
115 120 125

Asn Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn Val Asn Thr His Glu
130 135 140

Lys Val Lys Thr Ala Leu Asn Leu Phe Tyr Leu Thr Ile Ile Gly His
145 150 155 160

Gly Leu Ser Ile Ala Ser Leu Leu Ile Ser Leu Gly Ile Phe Phe Tyr
165 170 175

Phe Lys Ser Leu Ser Cys Gln Arg Ile Thr Leu His Lys Asn Leu Phe
180 185 190

Phe Ser Phe Val Cys Asn Ser Val Val Thr Ile Ile His Leu Thr Ala
195 200 205

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

Val Ser Gln Phe Ile His Leu Tyr Leu Met Gly Cys Asn Tyr Phe Trp
225 230 235 240

Met Leu Cys Glu Gly Ile Tyr Leu His Thr Leu Ile Val Val Ala Val
245 250 255

Phe Ala Glu Lys Gln His Leu Met Trp Tyr Tyr Phe Leu Gly Trp Gly
260 265 270

Phe Pro Leu Ile Pro Ala Cys Ile His Ala Ile Ala Arg Ser Leu Tyr
275 280 285

Tyr Asn Asp Asn Cys Trp Ile Ser Ser Asp Thr His Leu Leu Tyr Ile
290 295 300

Ile His Gly Pro Ile Cys Ala Ala Leu Leu Val Asn Leu Phe Phe Leu
305 310 315 320

Leu Asn Ile Val Arg Val Leu Ile Thr Lys Leu Lys Val Thr His Gln
325 330 335

Ala Glu Ser Asn Leu Tyr Met Lys Ala Val Arg Ala Thr Leu Ile Leu
340 345 350

Val Pro Leu Leu Gly Ile Glu Phe Val Leu Ile Pro Trp Arg Pro Glu
355 360 365

Gly Lys Ile Ala Glu Glu Val Tyr Asp Tyr Ile Met His Ile Leu Met
370 375 380

His Phe Gln Gly Leu Leu Val Ser Thr Ile Phe Cys Phe Phe Asn Gly
385 390 395 400

Glu Val Gln Ala Ile Leu Arg Arg Asn Trp Asn Gln Tyr Lys Ile Gln
405 410 415

Phe Gly Asn Ser Phe Ser Asn Ser Glu Ala Leu Arg Ser Ala Ser Tyr
420 425 430

Thr Val Ser Thr Ile Ser Asp Gly Pro Gly Tyr Ser His Asp Cys Pro
435 440 445

Ser Glu His Leu Asn Gly Lys Ser Ile His Asp Ile Glu Asn Val Leu
450 455 460

Leu Lys Pro Glu Asn Leu Tyr Asn
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<210> 3
<211> 447

<212> DNA
<213> Homo sapiens

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ctcacccagt tccaggtaga catggaggcc gtcggggaga cgctgtggtg tgactggggc 180

aggaccatca ggagctacag ggagctggcc gactgcacct ggcacatggc ggagaagctg 240

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<210> 4
<211> 148
<212> PRT
<213> Homo sapiens

<400> 4
Met Ala Arg Ala Leu Cys Arg Leu Pro Arg Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Thr Thr Ala Cys Gln Glu Ala Asn Tyr
20 25 30

Gly Ala Leu Leu Arg Glu Leu Cys Leu Thr Gln Phe Gln Val Asp Met
35 40 45

Glu Ala Val Gly Glu Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Arg
50 55 60

Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp His Met Ala Glu Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly Arg Tyr Phe Arg Ser Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser Ile Leu Tyr Pro Phe Ile Val Val Pro Ile Thr
115 120 125

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

Glu Gly Ile Val
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<210> 5

<211> 414
<212> DNA
<213> Homo sapiens

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atcatgacag ctcaatatga atgttaccaa aagattatgc aagaccccat tcaacaagca 180

gaaggcgttt actgcaacag aacctgggat ggatggctct gctggaacga tgttgcagca 240

ggaactgaat caatgcagct ctgccctgat tactttcagg actttgatcc atcagaaaaa 300

gttacaaaga tctgtgacca agatggaaac tggtttagac atccagcaag caacagaaca 360

tggacaaatt atacccagtg taatgttaac acccacgaga aagtgaagac tgca 414

<210> 6
<211> 138
<212> PRT
<213> Homo sapiens

<400> 6
Met Glu Lys Lys Cys Thr Leu Tyr Phe Leu Val Leu Leu Pro Phe Phe
1 5 10 15

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

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

Tyr Gln Lys Ile Met Gln Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr
50 55 60

Cys Asn Arg Thr Trp Asp Gly Trp Leu Cys Trp Asn Asp Val Ala Ala
65 70 75 80

Gly Thr Glu Ser Met Gln Leu Cys Pro Asp Tyr Phe Gln Asp Phe Asp
85 90 95

Pro Ser Glu Lys Val Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe
100 105 110

Arg His Pro Ala Ser Asn Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn
115 120 125

Val Asn Thr His Glu Lys Val Lys Thr Ala
130 135

<210> 7
<211> 351
<212> DNA
<213> Homo sapiens

<400> 7

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ctcacccagt tccaggtaga catggaggcc gtcggggaga cgctgtggtg tgactggggc 180

aggaccatca ggagctacag ggagctggcc gactgcacct ggcacatggc ggagaagctg 240

ggctgcttct ggcccaatgc agaggtggac aggttcttcc tggcagtgca tggccgctac 300

ttcaggagct gccccatctc aggcagggcc gtgcgggacc cgcccggcag c 351

<210> 8
<211> 117
<212> PRT
<213> Homo sapiens

<400> 8
Met Ala Arg Ala Leu Cys Arg Leu Pro Arg Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Thr Thr Ala Cys Gln Glu Ala Asn Tyr
20 25 30

Gly Ala Leu Leu Arg Glu Leu Cys Leu Thr Gln Phe Gln Val Asp Met
35 40 45

Glu Ala Val Gly Glu Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Arg
50 55 60

Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp His Met Ala Glu Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly Arg Tyr Phe Arg Ser Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser
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<210> 9
<211> 31
<212> PRT
<213> Homo sapiens

<400> 9
Trp Val Thr His Arg Leu Ala Gly Leu Leu Ser Arg Ser Gly Gly Val
1 5 10 15

Val Arg Cys Asn Phe Val Pro Thr Asp Val Gly Pro Phe Ala Phe
20 25 30

<210> 10
<211> 116
<212> PRT

<213> Homo sapiens

<400> 10

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Glu Leu Glu Glu Ser Pro Glu Asp Ser Ile Gln Leu Gly Val Thr Arg
1               5                  10                  15

Asn Lys Ile Met Thr Ala Gln Tyr Glu Cys Tyr Gln Lys Ile Met Gln
            20                  25                  30

Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr Cys Asn Arg Thr Trp Asp
        35                  40                  45

Gly Trp Leu Cys Trp Asn Asp Val Ala Ala Gly Thr Glu Ser Met Gln
    50                  55                  60

Leu Cys Pro Asp Tyr Phe Gln Asp Phe Asp Pro Ser Glu Lys Val Thr
65                  70                  75                  80

Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe Arg His Pro Ala Ser Asn
                85                  90                  95

Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn Val Asn Thr His Glu Lys
            100                 105                 110

Val Lys Thr Ala
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<210> 11
<211> 91
<212> PRT
<213> Homo sapiens

<400> 11

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Cys Gln Glu Ala Asn Tyr Gly Ala Leu Leu Arg Glu Leu Cys Leu Thr
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Gln Phe Gln Val Asp Met Glu Ala Val Gly Glu Thr Leu Trp Cys Asp
            20                  25                  30

Trp Gly Arg Thr Ile Arg Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp
        35                  40                  45

His Met Ala Glu Lys Leu Gly Cys Phe Trp Pro Asn Ala Glu Val Asp
    50                  55                  60

Arg Phe Phe Leu Ala Val His Gly Arg Tyr Phe Arg Ser Cys Pro Ile
65                  70                  75                  80

Ser Gly Arg Ala Val Arg Asp Pro Pro Gly Ser
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<210> 12
<211> 238
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 12

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

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

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

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

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

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

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

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

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

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

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

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

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

Gly Ser Thr Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
225                 230                 235
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<210> 13
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 13

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

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

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

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

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

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

Ala Trp Asp Asp Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys
115 120 125

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

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

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

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

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

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

Gly Ser Thr Val Glu Lys Thr Val Ala Pro Thr Glu Cys Ser

225 230 235

<210> 14
<211> 236
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

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

Tyr Asn Ile Tyr 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

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> 15
<211> 236
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 15
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

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> 16
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 16
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 Ile Leu Ala Gln Thr Pro Leu Ser
20 25 30

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

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

Gln Lys Pro Gly Gln Pro Pro Gln Leu Leu Ile Tyr Glu 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 Ile
100 105 110

Tyr Tyr Cys Met Gln Ser Phe Pro Leu 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> 17
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 17
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 Ser Val Leu Thr Gln Pro Pro Ser Val
20 25 30

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

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

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

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

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

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

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

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

Leu Ile Ser Asp Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala

165 170 175

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

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

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

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

<210> 18
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 18
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 Phe 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 Phe Thr Phe Gly Pro Gly
115 120 125

Thr Lys Val Asp 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

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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
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<210> 19
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 19

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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 Ile Leu Thr Gln Thr Pro Leu Ser
            20                  25                  30

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

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

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

Arg Phe Ser Gly Glu 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 Thr
            100                 105                 110

Tyr Tyr Cys Met Gln Ser Phe Pro Leu Pro Leu Thr Phe Gly Gly Gly
        115                 120                 125
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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
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<210> 20
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 20

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

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

Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln Phe Pro Gly
    50                  55                  60

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

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu
                85                  90                  95
```

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

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

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

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

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

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

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

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

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

<210> 21
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 21
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 Ser Val Leu Thr Gln Ser Pro Ser Ala
20 25 30

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

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

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

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

85 90 95

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

Ala Trp Asp Asp Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys
115 120 125

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

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

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

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

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

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

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

<210> 22
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 22
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 Ser Val Leu Thr Gln Pro Pro Ser Ala
20 25 30

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

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

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

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

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

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

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

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

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

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

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

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

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

<210> 23
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 23
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 Ser Val Leu Thr Gln Pro Pro Ser Ala
20 25 30

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

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

```
Ala Ala Pro Lys Leu Leu Ile Phe Arg Asn Asn Gln Arg Pro Ser Gly
65                  70                  75                  80

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

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

Ala Trp Asp Asp Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys
        115                 120                 125

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

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

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

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

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

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

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

<210> 24
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 24

```
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 Thr Leu Thr Gln Thr Pro Leu Ser
            20                  25                  30

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

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

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

Arg Phe Ser Gly Leu 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 Ile
100 105 110

Tyr Tyr Cys Met Gln Ser Phe Pro Leu 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> 25
<211> 238
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 25
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 Ser Val Leu Thr Gln Pro Pro Ser Val

20 25 30

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

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

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

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

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

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

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

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

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

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

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

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

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

<210> 26
<211> 236
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 26
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 Gly Ile Arg Lys Asp Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys
    50                  55                  60

Ala Pro Lys Arg Leu Ile Tyr Gly 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 Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln
            100                 105                 110

Tyr 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

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> 27
<211> 235
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 27
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 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

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

Gly Asn Ser Leu Cys 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> 28
<211> 235
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 28

```
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

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> 29
<211> 478
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 29

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

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

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

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

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Arg Leu Asn Tyr Tyr Asp Ser
        115                 120                 125

Ser Gly Tyr Tyr His Tyr Lys Tyr Tyr Gly Met Ala 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> 30
<211> 479
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 30
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 Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
35 40 45

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

Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Thr Thr Asp Gly Gly
65 70 75 80

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

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

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

Ile Ser Trp Ser Ser Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly
130 135 140

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
165 170 175

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
180 185 190

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

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
210 215 220

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

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
260 265 270

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

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> 31
<211> 478
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 31
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 Leu Glu Ser Gly Gly Gly
            20                  25                  30

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

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

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

Tyr Tyr Ala Asp Ser 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 Lys Asp Gln Arg Glu Val Gly Pro Tyr
        115                 120                 125

Ser Ser Gly Trp Tyr Asp 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> 32
<211> 478
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<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 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> 33
<211> 477
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 33
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 Ser Tyr Asp Gly Ser His Glu
65 70 75 80

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

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

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

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

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

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

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

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

Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu
245 250 255

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

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

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln
290 295 300

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

Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu

325 330 335

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

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

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

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

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

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

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

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

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

<210> 34
<211> 469
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

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

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

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

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

Thr Pro Glu Tyr Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
85 90 95

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

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

Arg Trp 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
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> 35
<211> 479
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 35
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 Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
35 40 45

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

Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly
65 70 75 80

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

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

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

Ile Ser Trp Ser Ser Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly
    130                 135                 140

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
                165                 170                 175

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
            180                 185                 190

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

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
    210                 215                 220

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

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
            260                 265                 270

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

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> 36
<211> 475
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<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 Asp Tyr Tyr Met Tyr Trp Val Arg Gln Ala Pro Gly
    50                  55                  60

Gln Gly Leu Glu Trp Met Gly Trp Ile Ser 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 Tyr Cys Val Arg Gly Gly Tyr Ser Gly Tyr Ala Gly
        115                 120                 125

Leu Tyr Ser His 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

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> 37
<211> 479
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 37
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 Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
35 40 45

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

Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly
65 70 75 80

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

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

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

Ile Ser Trp Ser Ser Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly

130 135 140

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
165 170 175

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
180 185 190

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

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
210 215 220

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

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
260 265 270

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

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> 38
<211> 479
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

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

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

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

Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly
65 70 75 80

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

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

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

Ile Ser Trp Ser Ser Tyr Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly
130 135 140

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
165 170 175

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
180 185 190

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

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
210 215 220

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

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
260 265 270

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

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> 39
<211> 478
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 39
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 Phe Gly Met His Trp Val Arg Gln Ala Pro Gly
50 55 60

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

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

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

Thr Ala Val Tyr Tyr Cys Ala Arg Asp Arg Leu Asn Tyr Tyr Asp Ser
115 120 125

Ser Gly Tyr Tyr His Tyr Lys Tyr Tyr Gly Leu Ala 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> 40
<211> 479
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<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 Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
        35                  40                  45

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

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

Thr Ala Val Tyr Tyr Cys Ala Arg Glu Gly Val Ser Gly Ser Ser Pro
        115                 120                 125

Tyr Ser Ile Ser Trp Tyr Asp Tyr Tyr Tyr Gly Met Asp Val Trp Gly
    130                 135                 140

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

Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
                165                 170                 175

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
            180                 185                 190
```

```
Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
        195                 200                 205

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
    210                 215                 220

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

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

Val Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
            260                 265                 270

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

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> 41
<211> 474
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 41
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
145 150 155 160

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

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

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

Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe

210 215 220

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

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

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

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

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

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

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

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

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

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

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

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

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> 42

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 42
Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser
1 5 10

<210> 43
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 43
Asp Asn Asn Lys Arg Pro Ser
1 5

<210> 44
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 44
Gly Thr Trp Asp Ser Arg Leu Ser Ala Val Val
1 5 10

<210> 45
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 45
Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Tyr Val Tyr
1 5 10

<210> 46
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 46
Arg Ser Asn Gln Arg Pro Ser
1 5

<210> 47
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 47
Ala Ala Trp Asp Asp Ser Leu Ser Gly Trp Val
1 5 10

<210> 48
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 48
Arg Ala Ser Gln Gly Ile Arg Asn Asp Leu Gly
1 5 10

<210> 49
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 49
Ala Ala Ser Ser Leu Gln Ser
1 5

<210> 50
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 50
Leu Gln Tyr Asn Ile Tyr Pro Trp Thr
1 5

<210> 51
<211> 11

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 51
Gln Gly Asp Ser Leu Arg Ser Phe Tyr Ala Ser
1 5 10

<210> 52
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 52
Gly Lys Asn Asn Arg Pro Ser
1 5

<210> 53
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 53
Asn Ser Arg Asp Ser Ser Val Tyr His Leu Val
1 5 10

<210> 54
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 54
Lys Ser Ser Gln Ser Leu Leu His Ser Ala Gly Lys Thr Tyr Leu Tyr
1 5 10 15

<210> 55
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 55
Glu Val Ser Asn Arg Phe Ser
1 5

<210> 56
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 56
Met Gln Ser Phe Pro Leu Pro Leu Thr
1 5

<210> 57
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 57
Arg Ser Ser Gln Ser Leu Leu His Ser Phe Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 58
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 58
Leu Gly Ser Asn Arg Ala Ser
1 5

<210> 59
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 59
Met Gln Ala Leu Gln Thr Pro Phe Thr
1 5

<210> 60
<211> 16
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 60
Lys Ser Ser Gln Ser Leu Leu His Ser Asp Gly Lys Thr Tyr Leu Tyr
1 5 10 15

<210> 61
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 61
Arg Asn Asn Gln Arg Pro Ser
1 5

<210> 62
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 62
Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn
1 5 10

<210> 63
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 63
Thr Asn Asn Gln Arg Pro Ser
1 5

<210> 64
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 64

Ala Ala Arg Asp Glu Ser Leu Asn Gly Val Val
1 5 10

<210> 65
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 65
Lys Ser Ser Gln Ser Leu Leu His Ser Asp Gly Arg Asn Tyr Leu Tyr
1 5 10 15

<210> 66
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 66
Arg Ala Ser Gln Gly Ile Arg Lys Asp Leu Gly
1 5 10

<210> 67
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 67
Gly Ala Ser Ser Leu Gln Ser
1 5

<210> 68
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 68
Leu Gln Tyr Asn Ser Phe Pro Trp Thr
1 5

<210> 69
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 69
Arg Ala Ser Gln Ser Val Ser Ser Gly Tyr Leu Thr
1 5 10

<210> 70
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 70
Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 71
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 71
Gln Gln Tyr Gly Asn Ser Leu Cys Arg
1 5

<210> 72
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 72
Gln Gln Tyr Gly Asn Ser Leu Ser Arg
1 5

<210> 73
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 73
Ser Phe Gly Met His

1 5

<210> 74
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 74
Val Ile Ser Phe Asp Gly Ser Ile Lys Tyr Ser Val Asp Ser Val Lys
1 5 10 15

Gly

<210> 75
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 75
Asp Arg Leu Asn Tyr Tyr Asp Ser Ser Gly Tyr Tyr His Tyr Lys Tyr
1 5 10 15

Tyr Gly Met Ala Val
20

<210> 76
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 76
Asn Ala Trp Met Ser
1 5

<210> 77
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 77
Arg Ile Lys Ser Thr Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro

1 5 10 15

Val Lys Gly

<210> 78
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 78
Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Tyr Tyr Tyr Tyr Tyr
1 5 10 15

Gly Met Asp Val
20

<210> 79
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 79
Ser Tyr Ala Met Ser
1 5

<210> 80
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 80
Ala Ile Ser Gly Ser Gly Gly Arg Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 81
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 81
Asp Gln Arg Glu Val Gly Pro Tyr Ser Ser Gly Trp Tyr Asp Tyr Tyr
1 5 10 15

Tyr Gly Met Asp Val
20

<210> 82
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 82
Gly Tyr Tyr Met His
1 5

<210> 83
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 83
Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 84
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 84
Asp Gln Met Ser Ile Ile Met Leu Arg Gly Val Phe Pro Pro Tyr Tyr
1 5 10 15

Tyr Gly Met Asp Val
20

<210> 85
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 85
Ser Tyr Gly Met His
1 5

<210> 86
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 86
Val Ile Ser Tyr Asp Gly Ser His Glu Ser Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 87
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 87
Glu Arg Lys Arg Val Thr Met Ser Thr Leu Tyr Tyr Tyr Phe Tyr Tyr
1 5 10 15

Gly Met Asp Val
20

<210> 88
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 88
Asp Tyr Ala Met Ser
1 5

<210> 89
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 89
Phe Ile Arg Ser Arg Ala Tyr Gly Gly Thr Pro Glu Tyr Ala Ala Ser
1 5 10 15

Val Lys Gly

<210> 90
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 90
Gly Arg Gly Ile Ala Ala Arg Trp Asp Tyr
1 5 10

<210> 91
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 91
Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Thr Ala Pro
1 5 10 15

Val Lys Gly

<210> 92
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 92
Asp Tyr Tyr Met Tyr
1 5

<210> 93
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 93
Trp Ile Ser Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 94
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 94
Gly Gly Tyr Ser Gly Tyr Ala Gly Leu Tyr Ser His Tyr Tyr Gly Met
1 5 10 15

Asp Val

<210> 95
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 95
Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro
1 5 10 15

Val Lys Gly

<210> 96
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 96
Asp Arg Leu Asn Tyr Tyr Asp Ser Ser Gly Tyr Tyr His Tyr Lys Tyr
1 5 10 15

Tyr Gly Leu Ala Val
20

<210> 97
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 97
Thr Tyr Ser Met Asn
1 5

<210> 98
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 98
Ser Ile Ser Ser Ser Ser Ser Tyr Arg Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 99
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 99
Glu Gly Val Ser Gly Ser Ser Pro Tyr Ser Ile Ser Trp Tyr Asp Tyr
1 5 10 15

Tyr Tyr Gly Met Asp Val
20

<210> 100
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 100

Ser Tyr Gly Met His
1 5

<210> 101
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 101
Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 102
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 102
Ala Gly Gly Ile Ala Ala Ala Gly Leu Tyr Tyr Tyr Tyr Gly Met Asp
1 5 10 15

Val

<210> 103
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Lys"

<220>
<221> misc_feature
<222> (8)..(8)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 103
Arg Ala Ser Gln Gly Ile Arg Asn Asp Leu Gly
1 5 10

<210> 104
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Gly"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 104
Ala Ala Ser Ser Leu Gln Ser
1 5

<210> 105
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Phe"

<220>
<221> misc_feature
<222> (5)..(6)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 105
Leu Gln Tyr Asn Ile Tyr Pro Trp Thr
1 5

<210> 106
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Cys"

<220>
<221> misc_feature
<222> (8)..(8)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 106
Gln Gln Tyr Gly Asn Ser Leu Ser Arg
1 5

<210> 107
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Gly"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Ile"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Arg"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Asn" or "Lys"

<220>
<221> misc_feature
<222> (5)..(8)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Asp"

<220>
<221> misc_feature
<222> (10)..(10)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>

<221> VARIANT
<222> (12)..(12)
<223> /replace="Gly"

<220>
<221> misc_feature
<222> (12)..(12)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 107
Arg Ala Ser Gln Ser Val Ser Ser Gly Tyr Leu Thr
1 5 10

<210> 108
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Gln"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (5)..(7)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 108
Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 109
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Leu"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Asn"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Thr"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Tyr" or "Phe"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Pro"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Trp" or "Ser"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Thr"

<220>
<221> misc_feature
<222> (4)..(9)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 109
Gln Gln Tyr Gly Asn Ser Leu Cys Arg
1 5

<210> 110
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (10)..(10)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Lys"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Thr"

<220>
<221> misc_feature
<222> (12)..(13)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 110
Lys Ser Ser Gln Ser Leu Leu His Ser Asp Gly Arg Asn Tyr Leu Tyr
1 5 10 15

<210> 111
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Lys"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Asp" or "Ala"

<220>
<221> misc_feature
<222> (10)..(10)
<223> /note="Residue given in the sequence has no preference with respect to those in the annotations for said position"

<220>
<221> VARIANT

<222> (12)..(12)
<223> /replace="Arg" or "Lys"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Thr"

<220>
<221> misc_feature
<222> (12)..(13)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (16)..(16)
<223> /replace="Tyr"

<220>
<221> misc_feature
<222> (16)..(16)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 111
Arg Ser Ser Gln Ser Leu Leu His Ser Phe Gly Tyr Asn Tyr Leu Asp
1 5 10 15

<210> 112
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Glu"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Val"

<220>
<221> misc_feature
<222> (1)..(2)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Phe"

<220>
<221> misc_feature
<222> (6)..(6)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 112
Leu Gly Ser Asn Arg Ala Ser
1 5

<210> 113
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Phe"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Pro"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Leu"

<220>
<221> misc_feature
<222> (3)..(6)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Leu"

<220>
<221> misc_feature
<222> (8)..(8)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 113
Met Gln Ala Leu Gln Thr Pro Phe Thr
1 5

<210> 114
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (2)..(2)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 114
Arg Asn Asn Gln Arg Pro Ser
1 5

<210> 115
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (9)..(9)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Thr"

<220>
<221> misc_feature
<222> (11)..(11)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Asn" or "Tyr"

<220>
<221> misc_feature
<222> (13)..(13)
<223> /note="Residue given in the sequence has no preference with respect to those in the annotation for said position"

<400> 115
Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser
1 5 10

<210> 116
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Thr" or "Arg"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (1)..(2)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Gln"

<220>
<221> misc_feature
<222> (4)..(4)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 116
Asp Asn Asn Lys Arg Pro Ser
1 5

<210> 117
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(2)
<223> /replace="Ala"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Arg"

<220>
<221> misc_feature
<222> (1)..(3)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Asp"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (5)..(6)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Asn"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Gly"

<220>
<221> misc_feature
<222> (8)..(9)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 117
Gly Thr Trp Asp Ser Arg Leu Ser Ala Val Val
1 5 10

<210> 118
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Gln"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace=" "

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Asp"

<220>
<221> misc_feature
<222> (3)..(4)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace=" "

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Arg"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Phe"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Thr"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Ala"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Asn" or "Tyr"

<220>
<221> misc_feature
<222> (6)..(13)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 118
Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser
1 5 10

<210> 119
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Gly" or "Thr" or "Arg"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Lys" or "Ser"

<220>
<221> misc_feature
<222> (1)..(2)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Asn" or "Gln"

<220>
<221> misc_feature
<222> (4)..(4)
<223> /note="Residue given in the sequence has no preference with respect to those in the annotations for said position"

<400> 119
Asp Asn Asn Lys Arg Pro Ser
1 5

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Asn" or "Ala"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Ser" or "Ala"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Arg"

<220>
<221> misc_feature
<222> (1)..(3)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (5)..(5)

<223> /replace="Asp"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Val"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Tyr" or "Asn"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="His" or "Gly"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Leu"

<220>
<221> misc_feature
<222> (5)..(10)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 120
Gly Thr Trp Asp Ser Arg Leu Ser Ala Val Val
1 5 10

<210> 121
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Asp"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Tyr"

<220>
<221> misc_feature
<222> (5)..(5)

<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 121
Gly Tyr Tyr Met His
1 5

<210> 122
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (3)..(3)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 122
Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 123
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(2)
<223> /replace="Gly"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Tyr"

<220>
<221> misc_feature
<222> (1)..(3)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT

<222> (5)..(5)
<223> /replace="Gly"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Tyr"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Ala"

<220>
<221> VARIANT
<222> (8)..(9)
<223> /replace=" "

<220>
<221> misc_feature
<222> (5)..(9)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Tyr"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace="His"

<220>
<221> misc_feature
<222> (11)..(14)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (17)..(17)
<223> /replace=" "

<220>
<221> misc_feature
<222> (17)..(17)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 123
Asp Gln Met Ser Ile Ile Met Leu Arg Gly Val Phe Pro Pro Tyr Tyr
1 5 10 15

Tyr Gly Met Asp Val
20

<210> 124
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Thr"

<220>
<221> misc_feature
<222> (5)..(5)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (14)..(14)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 124
Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Thr Ala Pro
1 5 10 15

Val Lys Gly

<210> 125
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT

<222> (3)..(3)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (3)..(3)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (5)..(5)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 125
Thr Tyr Ser Met Asn
1 5

<210> 126
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Gly"

<220>
<221> misc_feature
<222> (4)..(4)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (6)..(7)
<223> /replace="Gly"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Arg"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Thr"

<220>
<221> misc_feature
<222> (6)..(9)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 126
Ser Ile Ser Ser Ser Ser Ser Tyr Arg Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 127
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Asp"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Gln"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Arg"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Glu"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Val"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Gly"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace=" "

<220>
<221> misc_feature

<222> (1)..(7)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Gly"

<220>
<221> misc_feature
<222> (11)..(12)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 127
Glu Gly Val Ser Gly Ser Ser Pro Tyr Ser Ile Ser Trp Tyr Asp Tyr
1 5 10 15

Tyr Tyr Gly Met Asp Val
20

<210> 128
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Tyr"

<220>
<221> misc_feature
<222> (2)..(2)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 128
Ser Phe Gly Met His
1 5

<210> 129
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>

<221> VARIANT
<222> (4)..(4)
<223> /replace="Tyr"

<220>
<221> misc_feature
<222> (4)..(4)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="His"

<220>
<221> misc_feature
<222> (8)..(8)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Tyr"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (11)..(12)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 129
Val Ile Ser Phe Asp Gly Ser Ile Lys Tyr Ser Val Asp Ser Val Lys
1 5 10 15

Gly

<210> 130
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Glu"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Lys"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Arg"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Val"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Thr"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Met"

<220>
<221> misc_feature
<222> (3)..(7)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Thr"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Leu"

<220>
<221> misc_feature
<222> (9)..(10)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Tyr"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace=" "

<220>
<221> VARIANT
<222> (15)..(15)
<223> /replace="Phe"

<220>
<221> misc_feature
<222> (13)..(15)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (19)..(19)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (20)..(20)
<223> /replace="Asp"

<220>
<221> misc_feature
<222> (19)..(20)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 130
Asp Arg Leu Asn Tyr Tyr Asp Ser Ser Gly Tyr Tyr His Tyr Lys Tyr
1 5 10 15

Tyr Gly Met Ala Val
20

<210> 131
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Tyr" or "Phe"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Ala" or "Gly"

<220>
<221> misc_feature
<222> (1)..(3)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="His"

<220>
<221> misc_feature
<222> (5)..(5)
<223> /note="Residue given in the sequence has no preference with respect to that in the annotation for said position"

<400> 131
Asn Ala Trp Met Ser
1 5

<210> 132
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Ala" or "Val"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to those in the annotations for said position"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Ser" or "Trp"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Gly" or "Phe" or "Tyr"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Thr" or " "

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace=" "

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (3)..(7)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Arg" or "Ile" or "Asn" or "His"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Lys"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Tyr"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace="Ala" or "Val"

<220>
<221> VARIANT
<222> (15)..(15)
<223> /replace="Asp"

<220>
<221> VARIANT
<222> (16)..(16)
<223> /replace="Ser"

<220>
<221> misc_feature
<222> (9)..(16)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 132
Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Thr Ala Pro
1 5 10 15

Val Lys Gly

<210> 133
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Ala" or "Glu"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Gln" or "Gly"

<220>
<221> VARIANT

<222> (3)..(3)
<223> /replace="Arg" or "Leu" or "Gly" or "Lys"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Glu" or "Asn" or "Ile" or "Arg"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Val" or "Ala"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Gly" or "Tyr" or "Ala" or "Thr"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Pro" or "Asp" or "Ala" or "Met"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Tyr" or " "

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Ser" or "Thr" or " "

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Gly" or "Leu"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Gly" or "Leu" or "Tyr"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Tyr" or " "

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="His"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace="Asp" or " "

<220>
<221> VARIANT
<222> (15)..(15)
<223> /replace="Lys" or "Phe"

<220>
<221> VARIANT
<222> (16)..(17)
<223> /replace=" "

<220>
<221> misc_feature
<222> (1)..(17)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (19)..(19)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (20)..(20)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (19)..(20)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 133
Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Trp Tyr Tyr Tyr Tyr
1 5 10 15

Tyr Gly Met Asp Val
20

<210> 134
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Gly" or "Asp" or "Ser" or "Ala"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Phe" or "Tyr"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Tyr" or "Ala" or "Gly"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="His"

<220>

<221> misc_feature
<222> (1)..(5)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 134
Asn Ala Trp Met Ser
1 5

<210> 135
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Trp" or "Ala" or "Val" or "Ser" or "Phe"

<220>
<221> misc_feature
<222> (1)..(1)
<223> /note="Residue given in the sequence has no preference with respect to those in the annotations for said position"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Asn" or "Ser" or "Trp" or "Arg"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Pro" or "Gly" or "Phe" or "Tyr"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Thr" or "Arg" or " "

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Ala" or " "

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Asn" or "His" or "Ser" or "Tyr"

<220>
<221> VARIANT
<222> (8)..(9)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Gly" or "Arg" or "Ile" or "Asn" or "His" or "Tyr"

<220>

<221> VARIANT
<222> (11)..(11)
<223> /replace="Lys" or "Arg" or "Pro"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Asn" or "Tyr" or "Glu"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Ser"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace="Ala" or "Val"

<220>
<221> VARIANT
<222> (15)..(15)
<223> /replace="Gln" or "Asp"

<220>
<221> VARIANT
<222> (16)..(16)
<223> /replace="Lys" or "Ser"

<220>
<221> VARIANT
<222> (17)..(17)
<223> /replace="Phe"

<220>
<221> VARIANT
<222> (18)..(18)
<223> /replace="Gln"

<220>
<221> misc_feature
<222> (3)..(18)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 135
Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Thr Ala Pro
1 5 10 15

Val Lys Gly

<210> 136
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<220>
<221> VARIANT
<222> (1)..(1)

<223> /replace="Gly" or "Ala" or "Glu"

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace="Gly" or "Gln"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Met" or "Tyr" or "Arg" or "Leu" or "Gly" or "Lys"

<220>
<221> VARIANT
<222> (4)..(4)
<223> /replace="Ser" or "Glu" or "Asn" or "Ile" or "Arg"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Ile" or "Gly" or "Val" or "Ala"

<220>
<221> VARIANT
<222> (6)..(6)
<223> /replace="Ile" or "Tyr" or "Gly" or "Ala" or "Thr"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Met" or "Ala" or "Pro" or "Asp"

<220>
<221> VARIANT
<222> (8)..(8)
<223> /replace="Leu" or "Tyr" or " "

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Arg" or "Ser" or "Thr" or " "

<220>
<221> VARIANT
<222> (10)..(10)
<223> /replace="Gly" or "Leu"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Val" or "Leu" or "Gly" or "Tyr"

<220>
<221> VARIANT
<222> (12)..(12)
<223> /replace="Tyr" or "Trp" or " "

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Pro" or "Ser" or "His"

<220>
<221> VARIANT
<222> (14)..(14)
<223> /replace="Pro" or "Asp or "His" or " "

<220>

<221> VARIANT
<222> (15)..(15)
<223> /replace="Lys" or "Phe"

<220>
<221> VARIANT
<222> (16)..(17)
<223> /replace=" "

<220>
<221> misc_feature
<222> (1)..(17)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<220>
<221> VARIANT
<222> (19)..(19)
<223> /replace="Leu"

<220>
<221> VARIANT
<222> (20)..(20)
<223> /replace="Ala"

<220>
<221> misc_feature
<222> (19)..(20)
<223> /note="Residues given in the sequence have no preference with respect to those in the annotations for said positions"

<400> 136
Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Phe Tyr Tyr Tyr Tyr
1 5 10 15

Tyr Gly Met Asp Val
20

<210> 137
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 137
Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Glu Ala Pro Gly Gln
1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln

65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Arg Leu
85 90 95

Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 138
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 138
Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
20 25 30

Tyr Val Tyr Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu
35 40 45

Ile Phe Arg Ser Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
85 90 95

Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 139
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 139
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30

Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45

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

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

Glu Asp Leu Ala Thr Tyr Tyr Cys Leu Gln Tyr Asn Ile Tyr Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 140
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 140
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 Gln Gly Asp Ser Leu Arg Ser Phe Tyr Ala
20 25 30

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Phe Tyr
35 40 45

Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
50 55 60

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Val Tyr His
85 90 95

Leu Val Leu Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 141
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 141
Asp Ile Ile Leu Ala Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Ala Gly Lys Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro
35 40 45

Pro Gln Leu Leu Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Ser
85 90 95

Phe Pro Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 142
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 142
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 Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

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

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Arg Leu
85 90 95

Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 143
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 143
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 Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Phe Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105 110

<210> 144
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 144
Asp Ile Ile Leu Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asp Gly Lys Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro
35 40 45

Pro Gln Leu Leu Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Glu Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

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

Phe Pro Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 145
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 145
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 Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

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

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Arg Leu
85 90 95

Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 146
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 146
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 Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
20 25 30

Tyr Val Tyr Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu
35 40 45

Ile Leu Arg Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Thr Ile Ser Gly Leu Arg
65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
85 90 95

Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 147
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 147
Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
20 25 30

Thr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65 70 75 80

Ser Glu Asp Glu Ala Asp Phe Tyr Cys Ala Ala Arg Asp Glu Ser Leu
85 90 95

Asn Gly Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 148
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 148

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Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1               5                  10                  15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
            20                  25                  30

Tyr Val Tyr Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu
        35                  40                  45

Ile Phe Arg Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
    50                  55                  60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg
65                  70                  75                  80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
                85                  90                  95

Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
            100                 105                 110
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<210> 149
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 149

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

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu His Ser
            20                  25                  30

Asp Gly Arg Asn Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro
        35                  40                  45

Pro Gln Leu Leu Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Leu Pro
    50                  55                  60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80

Ser Arg Val Glu Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Ser
                85                  90                  95

Phe Pro Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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100 105 110

<210> 150
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 150
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 Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Arg Leu
85 90 95

Ser Ala Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 151
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 151
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Lys Asp
20 25 30

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

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

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Tyr Asn Ser Phe Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 152
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 152
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 Arg Ala Ser Gln Ser Val Ser Ser Gly
20 25 30

Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Asn Ser Leu
85 90 95

Cys Arg Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 153
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 153
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 Arg Ala Ser Gln Ser Val Ser Ser Gly

20 25 30

Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Asn Ser Leu
85 90 95

Ser Arg Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 154
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 154
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 Ile Leu Asp Ser
20 25 30

Ser Asn Asn Asp 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 Thr 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 Asn Thr Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile
100 105 110

Lys

<210> 155
<211> 107

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 155
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
20 25 30

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

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

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

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Tyr Asn Thr Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 156
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 156
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 Arg Ser Asn
20 25 30

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

His Asp Ala Ser Pro Arg Thr Ala Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Tyr Trp Thr Pro
85 90 95

Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 157
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 157
Gln Ser Val Leu Thr Gln Pro Pro Ser Met Ser Ala Ala Pro Gly Gln
1 5 10 15

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
20 25 30

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
35 40 45

Ile Tyr Asp Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln
65 70 75 80

Thr Gly Asp Glu Ala Asn Tyr Cys Cys Gly Thr Trp Asp Ile Gly Leu
85 90 95

Ser Val Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 158
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 158
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 Ser Phe
20 25 30

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

Ala Val Ile Ser Phe Asp Gly Ser Ile Lys Tyr Ser Val Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
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 Arg Leu Asn Tyr Tyr Asp Ser Ser Gly Tyr Tyr His Tyr
100 105 110

Lys Tyr Tyr Gly Met Ala Val Trp Gly Gln Gly Thr Thr Val Thr Val
115 120 125

Ser Ser
130

<210> 159
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 159
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 Asn Ala
20 25 30

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

Gly Arg Ile Lys Ser Thr Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

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

Tyr Cys Thr Thr Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Tyr
100 105 110

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
115 120 125

Val Ser Ser
130

<210> 160
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 160
Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Glu
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

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

Ser Ala Ile Ser Gly Ser Gly Gly Arg Thr Tyr Tyr Ala Asp Ser 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 Lys Asp Gln Arg Glu Val Gly Pro Tyr Ser Ser Gly Trp Tyr Asp
100 105 110

Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
115 120 125

Ser Ser
130

<210> 161
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 161
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 Gly Tyr

20 25 30

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

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

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

Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
115 120 125

Ser Ser
130

<210> 162
<211> 129
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 162
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 Ser Tyr
20 25 30

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

Ala Val Ile Ser Tyr Asp Gly Ser His Glu Ser Tyr Ala Asp Ser Val
50 55 60

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

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

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

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
115 120 125

Ser

<210> 163
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 163
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr
20 25 30

Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Phe Ile Arg Ser Arg Ala Tyr Gly Gly Thr Pro Glu Tyr Ala Ala
50 55 60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Thr Ile
65 70 75 80

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

Phe Cys Ala Arg Gly Arg Gly Ile Ala Ala Arg Trp Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 164
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 164
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 Asn Ala
20 25 30

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

Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Thr Ala
50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

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

Tyr Cys Thr Thr Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Tyr
100 105 110

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
115 120 125

Val Ser Ser
130

<210> 165
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 165
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 Asp Tyr
20 25 30

Tyr Met Tyr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Val Arg Gly Gly Tyr Ser Gly Tyr Ala Gly Leu Tyr Ser His Tyr Tyr

100 105 110

Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 166
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 166
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 Gly Asn Ala
20 25 30

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

Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

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

Phe Cys Thr Thr Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Tyr
100 105 110

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
115 120 125

Val Ser Ser
130

<210> 167
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 167
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 Gly Asn Ala
20 25 30

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

Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

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

Tyr Cys Thr Thr Asp Arg Thr Gly Tyr Ser Ile Ser Trp Ser Ser Tyr
100 105 110

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
115 120 125

Val Ser Ser
130

<210> 168
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 168
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 Ser Phe
20 25 30

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

Ala Val Ile Ser Phe Asp Gly Ser Ile Lys Tyr Ser Val Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
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 Arg Leu Asn Tyr Tyr Asp Ser Ser Gly Tyr Tyr His Tyr
100 105 110

Lys Tyr Tyr Gly Leu Ala Val Trp Gly Gln Gly Thr Thr Val Thr Val
115 120 125

Ser Ser
130

<210> 169
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 169
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 Tyr Thr Phe Ser Thr Tyr
20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Arg Tyr Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Arg Glu Gly Val Ser Gly Ser Ser Pro Tyr Ser Ile Ser Trp Tyr
100 105 110

Asp Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
115 120 125

Val Ser Ser
130

<210> 170
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 170
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 Ser Tyr
20 25 30

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

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

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

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 171
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 171
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 Ala Tyr
20 25 30

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

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Gly Arg Gln Trp Leu Gly Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 172
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 172
Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Ser Cys Ala Val Tyr Gly Gly Ser Phe Gly Gly Tyr
20 25 30

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn His Ser Gly Gly Thr Lys Tyr Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

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

Arg Gly Asp Val Val Gly Phe Phe Asp Tyr Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr Val Ser Ser
115

<210> 173
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 173
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Ser Gly Ala
1 5 10 15

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

20 25 30

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

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

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asn Glu Tyr Ser Ser Ala Trp Pro Leu Gly Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 174
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 174
Gln Ile Thr Leu Lys Glu Ser Gly Pro Thr Leu Val Lys Pro Thr Gln
1 5 10 15

Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Ser
20 25 30

Gly Val Gly Val Ala Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
35 40 45

Trp Leu Ala Leu Ile Tyr Trp Thr Asp Asp Lys Arg Tyr Ser Pro Ser
50 55 60

Leu Lys Ser Arg Leu Thr Ile Thr Lys Asp Thr Ser Lys Asn Gln Val
65 70 75 80

Val Leu Arg Met Thr Asn Met Asp Pro Leu Asp Thr Ala Thr Tyr Phe
85 90 95

Cys Ala His Arg Pro Gly Gly Trp Phe Asp Pro Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 175
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 175
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtttca gcagaaacca 120

gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240

gaagatttag caacttatta ctgtctacag tataatattt acccgtggac gttcggccaa 300

gggaccaagg tggaaatcaa a 321

<210> 176
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 176
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgcc gggcaagtca gggcattaga aaggatttag gctggtatca gcagaaacca 120

gggaaagccc ctaagcgcct gatctatgga gcatccagtt tgcaaagtgg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240

gaagattttg caacttatta ctgtctacag tataatagtt tcccgtggac gttcggccaa 300

gggaccaagg tggaaatcaa a 321

<210> 177
<211> 359
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 177
aggtgcagct ggtgcagtct ggggctgagg tgaagaagtc tggggcctca gtgaaggtct 60

cctgcaaggc ttctggatac accttcaccg gctactatat gcactgggtg cgacaggccc 120

ctggacaagg gcttgagtgg atgggatgga tcaaccctaa cagtggtggc acaaactatg 180

tacagaagtt tcagggcagg gtcaccatga ccagggacac gtccatcagc acagcctaca 240

tggagctgag caggctgaga tctgacgaca cggccgtgta ttactgtgcg agaaatgagt 300

atagcagtgc ctggcccttg gggtattggg gccagggaac cctggtcacc gtctctagt 359

<210> 178
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 178
gatattgtga tgactcagtc tccactctcc ctgcccgtca cccctggaga gccggcctcc 60

atctcctgca ggtctagtca gagcctcctg catagttttg ggtacaacta tttggattgg 120

tacctgcaga agccagggca gtctccacag ctcctgatct atttgggttc taatcgggcc 180

tccggggtcc ctgacaggtt cagtggcagt ggatcaggca cagattttac actgaaaatc 240

agcagagtgg aggctgagga tgttggggtt tattactgca tgcaagctct acaaactcca 300

ttcactttcg gccctgggac caaagtggat atcaaa 336

<210> 179
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 179
gatattatac tggcccagac tccactttct ctgtccgtca cccctggaca gccggcctcc 60

atctcctgca agtctagtca gagcctcctg cacagtgctg gaaagaccta tttgtattgg 120

tacctgcaga agccaggcca gcctccacag ctcctgatct atgaagtttc caaccggttc 180

tctggagtgc cagataggtt cagtggcagc gggtcaggga cagatttcac actgaaaatc 240

agccgggtgg aggctgagga tgttgggatt tattactgca tgcaaagttt tccgcttccg 300

ctcactttcg gcggagggac caaggtggag atcaaa 336

<210> 180
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 180
gatattattc tgacccagac tccactttct ctgtccgtca cccctggaca gccggcctcc 60

atctcctgca agtctagtca gagcctcctg cacagtgatg gaaagaccta tttgtattgg 120

tacctgcaga agcccggcca gcctccacag ctcctgatct atgaagtttc caaccggttc 180

tctggagagc cagataggtt cagtggcagc gggtcaggga cagatttcac actgaaaatc 240

agccgggtgg aggctgagga tgttgggact tattattgca tgcaaagttt tccgcttccg 300

ctcactttcg gcggagggac caaggtggag atcaaa 336

<210> 181
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 181
gatattacac tgacccagac tccactttct ctgtccgtct cccctggaca gccggcctcc 60

atctcctgca agtctagtca gagcctcctg cacagtgatg gaaggaacta tctgtattgg 120

tacctgcaga agccaggcca gcctccacag ctcctgatct atgaagtgtc caaccggttc 180

tctggactgc cagataggtt cagtggcagc gggtcaggga cagatttcac actgaaaatc 240

agccgggtgg aggctgagga tgttgggatt tattactgca tgcaaagttt tccgcttccg 300

ctcactttcg gcggagggac caaggtggag atcaaa 336

<210> 182
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 182
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttagc agcggctact taacctggta ccagcagaaa 120

cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 180

gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 240

cctgaagatt ttgcagtgta ttactgtcag cagtatggta actcactgtg caggtttggc 300

caggggacca agctggagat caaa 324

<210> 183
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 183
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttagc agcggctact taacctggta ccagcagaaa 120

cctggccagg ctcccagact cctcatctat ggtgcatcca gcagggccac tggcatccca 180

gacaggttca gtggcagtgg gtctgggacg gacttcactc tcaccatcag cagactggag 240

cctgaagatt ttgcagtgta ttactgtcag cagtatggta actcactgag caggtttggc 300

caggggacca agctggagat caaa 324

<210> 184
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 184
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60

ctctcctgta gggccagtca gagtgttcgc agcaatttag cctggtacca gcagaaacct 120

ggccaggctc ccaggctcct cattcatgat gcatcccccа ggaccgctgg tatcccagcc 180

aggttcagtg gcagtggatc tgggacagaa ttcactctca ccatcaacag cctgcagtct 240

gaagattttg cagtttatta ctgtcagcag tataattact ggactccgat caccttcggc 300

caagggacac gactggagat taaa 324

<210> 185
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 185
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60

atcaactgca agtccagcca gagtatttta gacagctcca acaatgataa ctacttagct 120

tggtaccagc agaaaccagg acagcctcct aaactgctca tttactgggc atctacccgg 180

gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240

atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttataatact 300

ccattcactt tcggccctgg gaccaaagtg gatatcaaa 339

<210> 186
<211> 330
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 186
cagtctgtgt tgacgcagcc gccctcagtg tctgaggccc caggacagaa ggtcaccatc 60

tcctgctctg gaagcagctc caacattggg aataattatg tatcctggta ccagcagctc 120

ccaggaacag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180

gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240

actggggacg aggccgatta ttactgcgga acatgggata gccgcctgag tgctgtggtt 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 187
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 187
cagtctgtgt tgacgcagcc gccctcagtg tctgcggccc caggacagaa ggtcaccatc 60

tcctgctctg gaagcagctc caacattggg aataattatg tatcctggta ccagcagctc 120

ccaggaacag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180

gaccgattct ctggctccaa gtctggcacg tcaaccaccc tgggcatcac cggactccag 240

actggggacg aggccgatta ttactgcgga acatgggata gccgcctgag tgctgtggtt 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 188
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 188
cagtctgtgt tgacgcagcc gccctcagtg tctgcggccc caggacagaa ggtcaccatc 60

tcctgctctg gaagcagctc caacattggg aataattatg tatcctggta ccagcagttc 120

ccaggaacag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180

gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240

actggggacg aggccgatta ttactgcgga acatgggata gccgcctgag tgctgtggtt 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 189
<211> 330

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 189
cagtctgtgt tgacgcagcc gccctcagtg tctgcggccc caggacagaa ggtcaccatc 60

tcctgctctg gaagcagctc caacattggg aataattatg tatcctggta ccagcagctc 120

ccaggaacag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180

gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240

actggggacg aggccgatta ttactgcgga acatgggata gccgcctgag tgctgtggtt 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 190
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 190
cagtctgtgt tgacgcagcc gccctcaatg tctgcggccc caggacagaa ggtcaccatc 60

tcctgctctg gaagcagctc caacattggg aataattatg tatcctggta ccagcagctc 120

ccaggaacag cccccaaact cctcatttat gacaataata agcgaccctc agggattcct 180

gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240

actggggacg aggccaatta ctgctgcgga acatgggata tcggcctgag tgtttgggtg 300

ttcggcggag ggaccaaact gaccgtccta 330

<210> 191
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 191
cagtctgtgc tgactcagcc accctcagcg tctgggaccc ccgggcagag ggtcaccatc 60

tcttgttctg gaagcagttc caatatcgga agtaatactg tgaactggta ccagcagctc 120

ccaggaacgg cccccaaact cctcatctat actaataatc agcggccctc aggggtccct 180

gaccgattct ctggctccaa gtctggcacc tcagcctccc tggccatcag tggactccag 240

tctgaggatg aggctgattt ttactgtgca gcgcgggatg agagcctgaa tggtgtggta 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 192
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 192
cagtctgtgc tgactcagcc accctcagcg tctgggaccc ccgggcagag agtcaccatc 60

tcttgttctg gaagcagctc caacatcggc agtaattatg tatactggta ccagcagctc 120

ccaggagcgg cccccaaact cctcatcttt aggaataatc agcggccctc aggggtccct 180

gaccgcttct ctggctccaa gtctggcacc tcagcctccc tggccatcag tgggctccgg 240

tccgaggatg aggctgatta ttactgtgca gcatgggatg acagcctgag tggttgggtg 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 193
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 193
cagtctgtgc tgactcagcc accctcagcg tctgggaccc ccgggcagag agtcaccatc 60

tcttgttctg gaagcagctc caacatcggc agtaattatg tatactggta ccagcagctc 120

ccaggagcgg cccccaaact cctcatcttt aggagtaatc agcggccctc aggggtccct 180

gaccgattct ctggctccaa gtctggcacc tcagcctccc tggccatcag tgggctccgg 240

tccgaggatg aggctgatta ttactgtgca gcatgggatg acagcctgag tggttgggtg 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 194
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 194
cagtctgtgc tgactcagtc accctcagcg tctgggaccc ccgggcagag agtcaccatc 60

tcttgttctg gaagcagctc caacatcggc agtaattatg tatactggta ccagcagctc 120

ccaggagcgg cccccaaact cctcatcctt aggaataatc agcggccctc aggggtccct 180

gaccgattct ctggctccaa gtctggcacc tcagcctccc tgaccatcag tgggctccgg 240

tccgaggatg aggctgacta ttattgtgca gcatgggatg acagcctgag tggttgggtg 300

ttcggcggag ggaccaagct gaccgtccta 330

<210> 195
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 195
tcttctgagc tgactcagga ccctactgtg tctgtggcct tgggacagac agtcaaaatc 60

acatgccaag gagacagcct cagaagtttt tatgcaagct ggtaccagca gaagccagga 120

caggcccctg tacttgtctt ctatggtaaa aacaaccggc cctcagggat cccagaccga 180

ttctctggct ccagctcagg aaacacagct tccttgacca tcactggggc tcaggcggaa 240

gatgaggctg actattattg taattcccgg gacagcagtg tttaccatct ggtactcggc 300

ggagggacca agctgaccgt ccta 324

<210> 196
<211> 390
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 196
caggtgcagt tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc ggctactata tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggatgg atcaacccta acagtggtgg cacaaactat 180

gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240

atggagctga gcaggctgag atctgacgac acggccgtgt atttctgtgc gagagatcaa 300

atgagtatta ttatgcttcg gggagttttt ccccccttact attacggtat ggacgtctgg 360

ggccaaggga ccacggtcac cgtctctagt 390

<210> 197
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 197
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc gactactata tgtactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggatgg atcagcccta atagtggtgg cacaaactat 180

gcccagaagt ttcagggcag ggtcaccatg accagggaca cgtctatcag cacagcctac 240

atggagctga gtaggctgag atctgacgac acggccgtgt attactgtgt gagaggagga 300

tatagtggct acgctgggct ctactcccac tactacggta tggacgtctg gggccaaggg 360

accacggtca ccgtctctag t 381

<210> 198
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 198
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc gcctactatt tacactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggatgg atcaaccctc acagtggtgg cacaaactat 180

gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240

atggagctga gcaggctgag atctgacgac acggccgtgt tctactgtgc gagaggaagg 300

cagtggctgg gctttgacta ctggggccag ggaaccctgg tcaccgtctc tagt 354

<210> 199
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 199
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagttacc 60

attacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120

gggaaagccc ctaagcgcct gatctatgtt gcatccagtt tgcaaagtgg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240

gaagattttg caacttatta ctgtctacag tataacactt acccgctcac tttcggcgga 300

gggaccaagg tggagatcaa g 321

<210> 200
<211> 393
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 200
gaggtacagc tggtggagtc tgggggaggc ttggtaaagc ctgggggGTC cctcagactc 60

tcctgtgcag cctctggatt cactttcggt aacgcctgga tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggttggccgt attaaaagca aaactgatgg tgggacaaca 180

gactacgctg cacccgtgaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240

ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtattt ctgtaccaca 300

gatcggaccg ggtatagcat cagctggtct agttactact actactacgg tatggacgtc 360

tggggccaag ggaccacggt caccgtctct agt 393

<210> 201
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 201
gaggtgcagc tggtggagtc tgggggaggc ttggtaaagc ctgggggGTC ccttagactc 60

tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggttggccgt attaaaagca aaactgatgg tgggacaaca 180

gactacactg cacccgtgaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240

ctgtatctgc aaatgaatag cctgaaagcc gaggacacag ccgtgtatta ctgtaccaca 300

gatcggaccg ggtatagcat cagctggtct agttactact actactacgg tatggacgtc 360

tggggccaag ggaccacggt caccgtctct agt 393

<210> 202
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 202
gaggtacagc tggtggagtc tgggggaggc ttggtaaagc ctgggggGTC ccttagactc 60

tcctgtgcag cctctggatt cactttcggt aacgcctgga tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggttggccgt attaaaagca aaactgatgg tgggacaaca 180

gactacgctg cacccgtgaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240

ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300

gatcggaccg ggtatagcat cagctggtct agttactact actactacgg tatggacgtc 360

tggggccaag ggaccacggt caccgtctct agt 393

<210> 203
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 203
gaggtgcagc tggtggagtc tgggggaggc ttggtaaagc ctgggggGTC ccttagactc 60

tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggttggccgt attaaaagca caactgatgg tgggacaaca 180

gactacgctg cacccgtgaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240

ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300

gatcggaccg gatatagcat cagctggtct agttactact actactacgg tatggacgtc 360

tggggccaag ggaccacggt caccgtctct agt 393

<210> 204
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 204
gaggtgcagc tggtggagtc tgggggaggc ctggtcaagc ctgggggGTC cctgagactc 60

tcctgtgcag cctctggata caccttcagt acctatagca tgaactgggt ccgccaggct 120

ccagggaagg ggctggagtg ggtctcatcc attagtagta gtagtagtta cagatattac 180

gcagactcag tgaagggccg attcaccatc tccagagaca acgccaagaa ctcactgtat 240

ctgcaaatga gtagcctgag agccgaggac acggctgtgt attactgtgc gagagaaggg 300

gtgtctggca gttcgccgta tagcatcagc tggtacgact actattacgg tatggacgtc 360

tggggccaag ggaccacggt caccgtctct agt 393

<210> 205
<211> 390
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 205
gaggtgcagc tattggagtc tgggggaggc ttggtacagc ctggggagtc cctgagactc 60

tcctgtgcag cctctgggtt cacctttagc agctatgcca tgagctgggt ccgccaggct 120

ccagggaagg ggctggagtg ggtctcagct attagtggta gtggtggtcg cacatactac 180

gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240

ctgcaaatga atagcctgag agccgaggac acggccgtat attactgtgc gaaagatcaa 300

agggaggtag ggccgtatag cagtggctgg tacgactact actacggtat ggacgtctgg 360

ggccaaggga ccacggtcac cgtctctagt 390

<210> 206
<211> 387
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 206
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120

ccaggcaagg ggctggagtg ggtggcagtt atttcatatg atggaagtca tgaatcctat 180

gcagactccg tgaagggccg attcaccatc tccagagaca tttccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agctgaggac acggctgtgt atttctgtgc gagagagagg 300

aaacgggtta cgatgtctac cttatattac tacttctact acggtatgga cgtctggggc 360

caagggacca cggtcaccgt ctctagt 387

<210> 207
<211> 390
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 207
caggtgcagc tggtggaatc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt agctttggca tgcactgggt ccgccaggct 120

ccaggcaagg ggctggagtg ggtggcagtt atatcatttg atggaagtat taagtattct 180

gtagactccg tgaagggccg attcaccatc tccagagaca attcaaagaa cacgctgttt 240

ctgcaaatga acagcctgcg agccgaggac acggctgtgt attactgtgc gagagatcgg 300

ctcaattact atgatagtag tggttattat cactacaaat actacggtat ggccgtctgg 360

ggccaaggga ccacggtcac cgtctctagt 390

<210> 208
<211> 390

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 208
caggtgcagc tggtggaatc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt agctttggca tgcattgggt ccgccaggct 120

ccaggcaagg ggctggagtg ggtggcagtt atatcatttg atggaagtat taagtactct 180

gtagactccg tgaagggccg attcaccatc tccagagaca attcaaagaa cacgctgttt 240

ctgcaaatga acagcctgcg agccgaggac acggctgtgt attactgtgc gagagatcgg 300

ctcaattact atgatagtag tggttattat cactacaaat actacggtct ggccgtctgg 360

ggccaaggga ccacggtcac cgtctctagt 390

<210> 209
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 209
gaggtgcagc tggtggagtc tgggggaggc ttggtaaagc agggcggtc cctgagactc 60

tcctgtacag cttctggatt cacctttggt gattatgcta tgagctggtt ccgccaggct 120

ccagggaagg ggctggagtg gataggtttc attagaagca gagcttatgg tgggacacca 180

gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaaccatc 240

gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtattt ctgtgctaga 300

ggacggggta ttgcagctcg ttgggactac tggggccagg gaaccctggt caccgtctct 360

agt 363

<210> 210
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 210
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120

ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180

gcagactccg tgaagggccg attcatcatc tccagagata aatccaagaa cacgctgtat 240

ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagcgggg 300

ggtatagcag cagctggcct ctactactac tacggtatgg acgtctgggg ccaagggacc 360

acggtcaccg tctctagt 378

<210> 211
<211> 351
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 211
caggtgcagt tacagcagtg gggcgcagga ctgttgaagc cttcggagac cctgtccctc 60

agctgcgctg tctatggtgg gtccttcggt ggttactact ggagctggat ccgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcata gtggaggcac caagtacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt tctgtgcgag aggcgatgta 300

gtaggtttct ttgactattg gggccaggga accctggtca ccgtctctag t 351

<210> 212
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 212
cagatcacct taaaggagtc tggtcctacg ctggtgaaac ccacacagac cctcacgctg 60

acctgcacct tctctgggtt ctcactcagc actagtggtg tgggtgtggc ctggatccgt 120

cagccccccg gaaaggccct ggagtggctt gcactcattt attggactga tgataagcgc 180

tacagtccat ctctgaagag caggctcacc atcaccaagg acacctccaa gaaccaggtg 240

gtccttagaa tgaccaacat ggacccttttg gacacagcca cttatttctg tgcacacaga 300

ccaggggggct ggttcgaccc ctggggccag ggaaccctgg tcaccgtctc tagt 354

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

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 213
Gly Gly Gly Gly Gly Val Asp Gly Gly Gly Gly Gly Val

1 5 10

<210> 214
<211> 148
<212> PRT
<213> Rattus sp.

<400> 214
Met Ala Pro Gly Leu Arg Gly Leu Pro Arg Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Val Thr Ala Cys Arg Asp Pro Asp Tyr
20 25 30

Gly Thr Leu Ile Gln Glu Leu Cys Leu Ser Arg Phe Lys Glu Asp Met
35 40 45

Glu Thr Ile Gly Lys Thr Leu Trp Cys Asp Trp Gly Lys Thr Ile Gly
50 55 60

Ser Tyr Gly Glu Leu Thr His Cys Thr Lys Leu Val Ala Asn Lys Ile
65 70 75 80

Gly Cys Phe Trp Pro Asn Pro Glu Val Asp Lys Phe Phe Ile Ala Val
85 90 95

His His Arg Tyr Phe Ser Lys Cys Pro Val Ser Gly Arg Ala Leu Arg
100 105 110

Asp Pro Pro Asn Ser Ile Leu Cys Pro Phe Ile Val Leu Pro Ile Thr
115 120 125

Val Thr Leu Leu Met Thr Ala Leu Val Val Trp Arg Ser Lys Arg Thr
130 135 140

Glu Gly Ile Val
145

<210> 215
<211> 148
<212> PRT
<213> Macaca fascicularis

<400> 215
Met Ala Arg Ala Leu Cys Arg Leu Pro Gln Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Ala Thr Ala Cys Gln Glu Ala Asn Tyr
20 25 30

Gly Ala Leu Leu Gln Glu Leu Cys Leu Thr Gln Phe Gln Val Asp Met
35 40 45

Glu Ala Val Gly Glu Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Gly

50 55 60

Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp His Met Ala Glu Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly His Tyr Phe Arg Ala Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser Val Leu Tyr Pro Phe Ile Val Val Pro Ile Thr
115 120 125

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

Glu Gly Ile Val
145

<210> 216
<211> 148
<212> PRT
<213> Macaca mulatta

<400> 216
Met Ala Arg Ala Leu Cys Arg Leu Pro Gln Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Ala Thr Ala Cys Gln Glu Ala Asn Tyr
20 25 30

Gly Ala Leu Leu Gln Glu Leu Cys Leu Thr Gln Phe Gln Val Asp Met
35 40 45

Glu Ala Val Gly Glu Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Gly
50 55 60

Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp His Met Ala Glu Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly His Tyr Phe Arg Ala Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser Val Leu Tyr Pro Phe Ile Val Val Pro Ile Thr
115 120 125

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

Glu Gly Ile Val
145

<210> 217
<211> 148
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 217
Met Ala Arg Ala Leu Cys Arg Leu Pro Arg Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Thr Thr Ala Cys Arg Asp Pro Asp Tyr
20 25 30

Gly Thr Leu Leu Arg Glu Leu Cys Leu Thr Gln Phe Gln Val Asp Met
35 40 45

Glu Ala Val Gly Glu Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Arg
50 55 60

Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp His Met Ala Glu Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly Arg Tyr Phe Arg Ser Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser Ile Leu Tyr Pro Phe Ile Val Val Pro Ile Thr
115 120 125

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

Glu Gly Ile Val
145

<210> 218
<211> 148
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 218
Met Ala Arg Ala Leu Cys Arg Leu Pro Arg Arg Gly Leu Trp Leu Leu

1 5 10 15

Leu Ala His His Leu Phe Met Thr Thr Ala Cys Gln Glu Ala Asn Tyr
20 25 30

Gly Ala Leu Leu Arg Glu Leu Cys Leu Thr Arg Phe Lys Glu Asp Met
35 40 45

Glu Thr Ile Gly Lys Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Arg
50 55 60

Ser Tyr Arg Glu Leu Ala Asp Cys Thr Trp His Met Ala Glu Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly Arg Tyr Phe Arg Ser Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser Ile Leu Tyr Pro Phe Ile Val Val Pro Ile Thr
115 120 125

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

Glu Gly Ile Val
145

<210> 219
<211> 148
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 219
Met Ala Arg Ala Leu Cys Arg Leu Pro Arg Arg Gly Leu Trp Leu Leu
1 5 10 15

Leu Ala His His Leu Phe Met Thr Thr Ala Cys Gln Glu Ala Asn Tyr
20 25 30

Gly Ala Leu Leu Arg Glu Leu Cys Leu Thr Gln Phe Gln Val Asp Met
35 40 45

Glu Ala Val Gly Glu Thr Leu Trp Cys Asp Trp Gly Arg Thr Ile Arg
50 55 60

Ser Tyr Gly Glu Leu Thr His Cys Thr Lys Leu Val Ala Asn Lys Leu
65 70 75 80

Gly Cys Phe Trp Pro Asn Ala Glu Val Asp Arg Phe Phe Leu Ala Val
85 90 95

His Gly Arg Tyr Phe Arg Ser Cys Pro Ile Ser Gly Arg Ala Val Arg
100 105 110

Asp Pro Pro Gly Ser Ile Leu Tyr Pro Phe Ile Val Val Pro Ile Thr
115 120 125

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

Glu Gly Ile Val
145

<210> 220
<211> 464
<212> PRT
<213> Rattus sp.

<400> 220
Met Met Asp Lys Lys Cys Thr Leu Cys Phe Leu Phe Leu Leu Leu Leu
1 5 10 15

Asn Met Ala Leu Ile Ala Ala Glu Ser Glu Glu Gly Ala Asn Gln Thr
20 25 30

Asp Leu Gly Val Thr Arg Asn Lys Ile Met Thr Ala Gln Tyr Glu Cys
35 40 45

Tyr Gln Lys Ile Met Gln Asp Pro Ile Gln Gln Gly Glu Gly Leu Tyr
50 55 60

Cys Asn Arg Thr Trp Asp Gly Trp Leu Cys Trp Asn Asp Val Ala Ala
65 70 75 80

Gly Thr Glu Ser Met Gln Tyr Cys Pro Asp Tyr Phe Gln Asp Phe Asp
85 90 95

Pro Ser Glu Lys Val Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe
100 105 110

Arg His Pro Asp Ser Asn Arg Thr Trp Thr Asn Tyr Thr Leu Cys Asn
115 120 125

Asn Ser Thr His Glu Lys Val Lys Thr Ala Leu Asn Leu Phe Tyr Leu
130 135 140

Thr Ile Ile Gly His Gly Leu Ser Ile Ala Ser Leu Ile Ile Ser Leu
145 150 155 160

Ile Ile Phe Phe Tyr Phe Lys Ser Leu Ser Cys Gln Arg Ile Thr Leu
165 170 175

His Lys Asn Leu Phe Phe Ser Phe Val Cys Asn Ser Ile Val Thr Ile
180 185 190

Ile His Leu Thr Ala Val Ala Asn Asn Gln Ala Leu Val Ala Thr Asn
195 200 205

Pro Val Ser Cys Lys Val Ser Gln Phe Ile His Leu Tyr Leu Met Gly
210 215 220

Cys Asn Tyr Phe Trp Met Leu Cys Glu Gly Ile Tyr Leu His Thr Leu
225 230 235 240

Ile Val Val Ala Val Phe Ala Glu Lys Gln His Leu Met Trp Tyr Tyr
245 250 255

Phe Leu Gly Trp Gly Phe Pro Leu Leu Pro Ala Cys Ile His Ala Ile
260 265 270

Ala Arg Ser Leu Tyr Tyr Asn Asp Asn Cys Trp Ile Ser Ser Asp Thr
275 280 285

His Leu Leu Tyr Ile Ile His Gly Pro Ile Cys Ala Ala Leu Leu Val
290 295 300

Asn Leu Phe Phe Leu Leu Asn Ile Val Arg Val Leu Ile Thr Lys Leu
305 310 315 320

Lys Val Thr His Gln Ala Glu Ser Asn Leu Tyr Met Lys Ala Val Arg
325 330 335

Ala Thr Leu Ile Leu Val Pro Leu Leu Gly Ile Glu Phe Val Leu Phe
340 345 350

Pro Trp Arg Pro Glu Gly Lys Val Ala Glu Glu Val Tyr Asp Tyr Val
355 360 365

Met His Ile Leu Met His Tyr Gln Gly Leu Leu Val Ser Thr Ile Phe
370 375 380

Cys Phe Phe Asn Gly Glu Val Gln Ala Ile Leu Arg Arg Asn Trp Asn
385 390 395 400

Gln Tyr Lys Ile Gln Phe Gly Asn Gly Phe Ser His Ser Asp Ala Leu
405 410 415

Arg Ser Ala Ser Tyr Thr Val Ser Thr Ile Ser Asp Val Gln Gly Tyr
420 425 430

Ser His Asp Cys Pro Thr Glu His Leu Asn Gly Lys Ser Ile Gln Asp
435 440 445

Ile Glu Asn Val Ala Leu Lys Pro Glu Lys Met Tyr Asp Leu Val Met
450 455 460

<210> 221
<211> 461
<212> PRT
<213> Macaca fascicularis

<400> 221
Met Glu Lys Lys Cys Thr Leu Tyr Phe Leu Val Leu Leu Pro Phe Phe
1 5 10 15

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

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

Tyr Gln Lys Ile Met Gln Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr
50 55 60

Cys Asn Arg Thr Trp Asp Gly Trp Leu Cys Trp Asn Asn Val Ala Ala
65 70 75 80

Gly Thr Glu Ser Met Gln Leu Cys Pro Asp Tyr Phe Gln Asp Phe Asp
85 90 95

Pro Ser Glu Lys Val Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe
100 105 110

Arg His Pro Ala Ser Asn Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn
115 120 125

Val Asn Thr His Glu Lys Val Lys Thr Ala Leu Asn Leu Phe Tyr Leu
130 135 140

Thr Ile Ile Gly His Gly Leu Ser Ile Ala Ser Leu Leu Ile Ser Leu
145 150 155 160

Gly Ile Phe Phe Tyr Phe Lys Ser Leu Ser Cys Gln Arg Ile Thr Leu
165 170 175

His Lys Asn Leu Phe Phe Ser Phe Val Cys Asn Ser Val Val Thr Ile
180 185 190

Ile His Leu Thr Ala Val Ala Asn Asn Gln Ala Leu Val Ala Thr Asn
195 200 205

Pro Val Ser Cys Lys Val Ser Gln Phe Ile His Leu Tyr Leu Met Gly
210 215 220

Cys Asn Tyr Phe Trp Met Leu Cys Glu Gly Ile Tyr Leu His Thr Leu
225 230 235 240

Ile Val Val Ala Val Phe Ala Glu Lys Gln His Leu Met Trp Tyr Tyr
245 250 255

Phe Leu Gly Trp Gly Phe Pro Leu Ile Pro Ala Cys Ile His Ala Ile
260 265 270

Ala Arg Ser Leu Tyr Tyr Asn Asp Asn Cys Trp Ile Ser Ser Asp Thr
275 280 285

His Leu Leu Tyr Ile Ile His Gly Pro Ile Cys Ala Ala Leu Leu Val
290 295 300

Asn Leu Phe Phe Leu Leu Asn Ile Val Arg Val Leu Ile Thr Lys Leu
305 310 315 320

Lys Val Thr His Gln Ala Glu Ser Asn Leu Tyr Met Lys Ala Val Arg
325 330 335

Ala Thr Leu Ile Leu Val Pro Leu Leu Gly Ile Glu Phe Val Leu Ile
340 345 350

Pro Trp Arg Pro Glu Gly Lys Ile Ala Glu Glu Val Tyr Asp Tyr Ile
355 360 365

Met His Ile Leu Met His Phe Gln Gly Leu Leu Val Ser Thr Ile Phe
370 375 380

Cys Phe Phe Asn Gly Glu Val Gln Ala Ile Leu Arg Arg Asn Trp Asn
385 390 395 400

Gln Tyr Lys Ile Gln Phe Gly Asn Ser Phe Ser Asn Ser Glu Ala Leu
405 410 415

Arg Ser Ala Ser Tyr Thr Val Ser Thr Ile Ser Asp Gly Pro Gly Tyr
420 425 430

Ser His Asp Cys Pro Ser Glu His Leu Asn Gly Lys Ser Ile His Asp
435 440 445

Ile Glu Asn Val Val Leu Lys Pro Glu Asn Leu Tyr Asn
450 455 460

<210> 222
<211> 461
<212> PRT
<213> Macaca mulatta

<400> 222

Met Glu Lys Lys Cys Thr Leu Tyr Phe Leu Val Leu Leu Pro Phe Phe
1 5 10 15

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

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

Tyr Gln Lys Ile Met Gln Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr
50 55 60

Cys Asn Arg Thr Trp Asp Gly Trp Leu Cys Trp Asn Asn Val Ala Ala
65 70 75 80

Gly Thr Glu Ser Met Gln Leu Cys Pro Asp Tyr Phe Gln Asp Phe Asp
85 90 95

Pro Ser Glu Lys Val Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe
100 105 110

Arg His Pro Ala Ser Asn Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn
115 120 125

Val Asn Thr His Glu Lys Val Lys Thr Ala Leu Asn Leu Phe Tyr Leu
130 135 140

Thr Ile Ile Gly His Gly Leu Ser Ile Ala Ser Leu Leu Ile Ser Leu
145 150 155 160

Gly Ile Phe Phe Tyr Phe Lys Ser Leu Ser Cys Gln Arg Ile Thr Leu
165 170 175

His Lys Asn Leu Phe Phe Ser Phe Val Cys Asn Ser Val Val Thr Ile
180 185 190

Ile His Leu Thr Ala Val Ala Asn Asn Gln Ala Leu Val Ala Thr Asn
195 200 205

Pro Val Ser Cys Lys Val Ser Gln Phe Ile His Leu Tyr Leu Met Gly
210 215 220

Cys Asn Tyr Phe Trp Met Leu Cys Glu Gly Ile Tyr Leu His Thr Leu
225 230 235 240

Ile Val Val Ala Val Phe Ala Glu Lys Gln His Leu Met Trp Tyr Tyr
245 250 255

Phe Leu Gly Trp Gly Phe Pro Leu Ile Pro Ala Cys Ile His Ala Ile
260 265 270

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Ala Arg Ser Leu Tyr Tyr Asn Asp Asn Cys Trp Ile Ser Ser Asp Thr
        275                 280                 285

His Leu Leu Tyr Ile Ile His Gly Pro Ile Cys Ala Ala Leu Leu Val
    290                 295                 300

Asn Leu Phe Phe Leu Leu Asn Ile Val Arg Val Leu Ile Thr Lys Leu
305                 310                 315                 320

Lys Val Thr His Gln Ala Glu Ser Asn Leu Tyr Met Lys Ala Val Arg
                325                 330                 335

Ala Thr Leu Ile Leu Val Pro Leu Leu Gly Ile Glu Phe Val Leu Ile
            340                 345                 350

Pro Trp Arg Pro Glu Gly Lys Ile Ala Glu Glu Val Tyr Asp Tyr Ile
        355                 360                 365

Met His Ile Leu Met His Phe Gln Gly Leu Leu Val Ser Thr Ile Phe
    370                 375                 380

Cys Phe Phe Asn Gly Glu Val Gln Ala Ile Leu Arg Arg Asn Trp Asn
385                 390                 395                 400

Gln Tyr Lys Ile Gln Phe Gly Asn Ser Phe Ser Asn Ser Glu Ala Leu
                405                 410                 415

Arg Ser Ala Ser Tyr Thr Val Ser Thr Ile Ser Asp Gly Pro Gly Tyr
            420                 425                 430

Ser His Asp Cys Pro Ser Glu His Leu Asn Gly Lys Ser Ile His Asp
        435                 440                 445

Ile Glu Asn Val Val Leu Lys Pro Glu Asn Leu Tyr Asn
    450                 455                 460
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<210> 223
<211> 460
<212> PRT
<213> Artificial Sequence

<220>
<221> source.
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 223

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Met Glu Lys Lys Cys Thr Leu Tyr Phe Leu Val Leu Leu Pro Phe Phe
1               5                   10                  15

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

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

Gln Lys Ile Met Gln Asp Pro Ile Gln Gln Ala Glu Gly Val Tyr Cys
50 55 60

Asn Arg Thr Trp Asp Gly Trp Leu Cys Trp Asn Asp Val Ala Ala Gly
65 70 75 80

Thr Glu Ser Met Gln Leu Cys Pro Asp Tyr Phe Gln Asp Phe Asp Pro
85 90 95

Ser Glu Lys Val Thr Lys Ile Cys Asp Gln Asp Gly Asn Trp Phe Arg
100 105 110

His Pro Ala Ser Asn Arg Thr Trp Thr Asn Tyr Thr Gln Cys Asn Val
115 120 125

Asn Thr His Glu Lys Val Lys Thr Ala Leu Asn Leu Phe Tyr Leu Thr
130 135 140

Ile Ile Gly His Gly Leu Ser Ile Ala Ser Leu Leu Ile Ser Leu Gly
145 150 155 160

Ile Phe Phe Tyr Phe Lys Ser Leu Ser Cys Gln Arg Ile Thr Leu His
165 170 175

Lys Asn Leu Phe Phe Ser Phe Val Cys Asn Ser Val Val Thr Ile Ile
180 185 190

His Leu Thr Ala Val Ala Asn Asn Gln Ala Leu Val Ala Thr Asn Pro
195 200 205

Val Ser Cys Lys Val Ser Gln Phe Ile His Leu Tyr Leu Met Gly Cys
210 215 220

Asn Tyr Phe Trp Met Leu Cys Glu Gly Ile Tyr Leu His Thr Leu Ile
225 230 235 240

Val Val Ala Val Phe Ala Glu Lys Gln His Leu Met Trp Tyr Tyr Phe
245 250 255

Leu Gly Trp Gly Phe Pro Leu Ile Pro Ala Cys Ile His Ala Ile Ala
260 265 270

Arg Ser Leu Tyr Tyr Asn Asp Asn Cys Trp Ile Ser Ser Asp Thr His
275 280 285

Leu Leu Tyr Ile Ile His Gly Pro Ile Cys Ala Ala Leu Leu Val Asn
290 295 300

Leu Phe Phe Leu Leu Asn Ile Val Arg Val Leu Ile Thr Lys Leu Lys

305 310 315 320

Val Thr His Gln Ala Glu Ser Asn Leu Tyr Met Lys Ala Val Arg Ala
325 330 335

Thr Leu Ile Leu Val Pro Leu Leu Gly Ile Glu Phe Val Leu Ile Pro
340 345 350

Trp Arg Pro Glu Gly Lys Ile Ala Glu Glu Val Tyr Asp Tyr Ile Met
355 360 365

His Ile Leu Met His Phe Gln Gly Leu Leu Val Ser Thr Ile Phe Cys
370 375 380

Phe Phe Asn Gly Glu Val Gln Ala Ile Leu Arg Arg Asn Trp Asn Gln
385 390 395 400

Tyr Lys Ile Gln Phe Gly Asn Ser Phe Ser Asn Ser Glu Ala Leu Arg
405 410 415

Ser Ala Ser Tyr Thr Val Ser Thr Ile Ser Asp Gly Pro Gly Tyr Ser
420 425 430

His Asp Cys Pro Ser Glu His Leu Asn Gly Lys Ser Ile His Asp Ile
435 440 445

Glu Asn Val Leu Leu Lys Pro Glu Asn Leu Tyr Asn
450 455 460

<210> 224
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 224
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagt ctgtgttgac gcagccgccc tcagtgtctg aggccccagg acagaaggtc 120

accatctcct gctctggaag cagctccaac attgggaata attatgtatc ctggtaccag 180

cagctcccag gaacagcccc caaactcctc atttatgaca ataataagcg accctcaggg 240

attcctgacc gattctctgg ctccaagtct ggcacgtcag ccaccctggg catcaccgga 300

ctccagactg gggacgaggc cgattattac tgcggaacat gggatagccg cctgagtgct 360

gtggttttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 225
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 225
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagt ctgtgctgac tcagccaccc tcagcgtctg ggaccccggg gcagagagtc 120

accatctctt gttctggaag cagctccaac atcggcagta attatgtata ctggtaccag 180

cagctcccag gagcggcccc caaactcctc atctttagga gtaatcagcg gccctcaggg 240

gtccctgacc gattctctgg ctccaagtct ggcacctcag cctccctggc catcagtggg 300

ctccggtccg aggatgaggc tgattattac tgtgcagcat gggatgacag cctgagtggt 360

tgggtgttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 226
<211> 708
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 226
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgaca tccagatgac ccagtctcca tcctccctgt ctgcatctgt aggagacaga 120

gtcaccatca cttgccgggc aagtcagggc attagaaatg atttaggctg gtttcagcag 180

aaaccaggga aagcccctaa gcgcctgatc tatgctgcat ccagtttgca aagtggggtc 240

ccatcaaggt tcagcggcag tggatctggg acagaattca ctctcacaat cagcagcctg 300

cagcctgaag atttagcaac ttattactgt ctacagtata atatttaccc gtggacgttc 360

ggccaaggga ccaaggtgga aatcaaacgt acggtggctg caccatctgt cttcatcttc 420

ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480

ttctatccca gagaggccaa agtacagtgg aaggtggata acgccctcca atcgggtaac 540

tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600

ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660

cagggcctga gctcgcccgt cacaaagagc ttcaacaggg gagagtgt 708

<210> 227
<211> 708
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 227
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgttctt ctgagctgac tcaggaccct actgtgtctg tggccttggg acagacagtc 120

aaaatcacat gccaaggaga cagcctcaga agtttttatg caagctggta ccagcagaag 180

ccaggacagg cccctgtact tgtcttctat ggtaaaaaca accggccctc agggatccca 240

gaccgattct ctggctccag ctcaggaaac acagcttcct tgaccatcac tggggctcag 300

gcggaagatg aggctgacta ttattgtaat tcccgggaca gcagtgttta ccatctggta 360

ctcggcggag ggaccaagct gaccgtccta ggtcagccca aggccaaccc cactgtcact 420

ctgttcccgc cctcctctga ggagctccaa gccaacaagg ccacactagt gtgtctgatc 480

agtgacttct acccgggagc tgtgacagtg gcctggaagg cagatggcag ccccgtcaag 540

gcgggagtgg agaccaccaa accctccaaa cagagcaaca acaagtacgc ggccagcagc 600

tacctgagcc tgacgcccga gcagtggaag tcccacagaa gctacagctg ccaggtcacg 660

catgaaggga gcaccgtgga gaagacagtg gcccctacag aatgttca 708

<210> 228
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 228
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgata ttatactggc ccagactcca ctttctctgt ccgtcacccc tggacagccg 120

gcctccatct cctgcaagtc tagtcagagc ctcctgcaca gtgctggaaa gacctatttg 180

tattggtacc tgcagaagcc aggccagcct ccacagctcc tgatctatga agtttccaac 240

cggttctctg gagtgccaga taggttcagt ggcagcgggt cagggacaga tttcacactg 300

aaaatcagcc gggtggaggc tgaggatgtt gggatttatt actgcatgca aagttttccg 360

cttccgctca ctttcggcgg agggaccaag gtggagatca aacgtacggt ggctgcacca 420

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 cccgtcacaa agagcttcaa caggggagag 720

tgt 723

<210> 229
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 229
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagt ctgtgttgac gcagccgccc tcagtgtctg cggccccagg acagaaggtc 120

accatctcct gctctggaag cagctccaac attgggaata ttatgtatc ctggtaccag 180

cagctcccag gaacagcccc caaactcctc atttatgaca ataataagcg accctcaggg 240

attcctgacc gattctctgg ctccaagtct ggcacgtcaa ccaccctggg catcaccgga 300

ctccagactg gggacgaggc cgattattac tgcggaacat gggatagccg cctgagtgct 360

gtggttttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 230
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 230
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgata ttgtgatgac tcagtctcca ctctccctgc ccgtcacccc tggagagccg 120

gcctccatct cctgcaggtc tagtcagagc ctcctgcata gttttgggta caactatttg 180

gattggtacc tgcagaagcc agggcagtct ccacagctcc tgatctattt gggttctaat 240

cgggcctccg gggtccctga caggttcagt ggcagtggat caggcacaga ttttacactg 300

aaaatcagca gagtggaggc tgaggatgtt ggggtttatt actgcatgca agctctacaa 360

actccattca ctttcggccc tgggaccaaa gtggatatca aacgtacggt ggctgcacca 420

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 cccgtcacaa agagcttcaa caggggagag 720

tgt 723

<210> 231
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 231
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgata ttattctgac ccagactcca ctttctctgt ccgtcacccc tggacagccg 120

gcctccatct cctgcaagtc tagtcagagc ctcctgcaca gtgatggaaa gacctatttg 180

tattggtacc tgcagaagcc cggccagcct ccacagctcc tgatctatga agtttccaac 240

cggttctctg gagagccaga taggttcagt ggcagcgggt cagggacaga tttcacactg 300

aaaatcagcc gggtggaggc tgaggatgtt gggacttatt attgcatgca aagttttccg 360

cttccgctca ctttcggcgg agggaccaag gtggagatca aacgtacggt ggctgcacca 420

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 cccgtcacaa agagcttcaa caggggagag 720

tgt 723

<210> 232
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 232
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagt ctgtgttgac gcagccgccc tcagtgtctg cggccccagg acagaaggtc 120

accatctcct gctctggaag cagctccaac attgggaata ttatgtatc ctggtaccag 180

cagttcccag gaacagcccc caaactcctc atttatgaca ataataagcg accctcaggg 240

attcctgacc gattctctgg ctccaagtct ggcacgtcag ccaccctggg catcaccgga 300

ctccagactg gggacgaggc cgattattac tgcggaacat gggatagccg cctgagtgct 360

gtggttttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 233
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 233
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cgctgtcagt ctgtgctgac tcagtcaccc tcagcgtctg ggacccccgg gcagagagtc 120

accatctctt gttctggaag cagctccaac atcggcagta attatgtata ctggtaccag 180

cagctcccag gagcggcccc caaactcctc atccttagga ataatcagcg gccctcaggg 240

gtccctgacc gattctctgg ctccaagtct ggcacctcag cctccctgac catcagtggg 300

ctccggtccg aggatgaggc tgactattat tgtgcagcat gggatgacag cctgagtggt 360

tgggtgttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 234
<211> 714
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 234
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cgctgtcagt ctgtgctgac tcagccaccc tcagcgtctg ggaccccggg gcagagggtc 120

accatctctt gttctggaag cagttccaat atcggaagta atactgtgaa ctggtaccag 180

cagctcccag gaacggcccc caaactcctc atctatacta ataatcagcg gccctcaggg 240

gtccctgacc gattctctgg ctccaagtct ggcacctcag cctccctggc catcagtgga 300

ctccagtctg aggatgaggc tgatttttac tgtgcagcgc gggatgagag cctgaatggt 360

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gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 235
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 235
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cgctgtcagt ctgtgctgac tcagccaccc tcagcgtctg ggaccccggg gcagagagtc 120

accatctctt gttctggaag cagctccaac atcggcagta attatgtata ctggtaccag 180

cagctcccag gagcggcccc caaactcctc atctttagga ataatcagcg gccctcaggg 240

gtccctgacc gcttctctgg ctccaagtct ggcacctcag cctccctggc catcagtggg 300

ctccggtccg aggatgaggc tgattattac tgtgcagcat gggatgacag cctgagtggt 360

tgggtgttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 236
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 236
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagt ctgtgctgac tcagccaccc tcagcgtctg ggaccccggg gcagagagtc 120

accatctctt gttctggaag cagctccaac atcggcagta attatgtata ctggtaccag 180

cagctcccag gagcggcccc caaactcctc atctttagga ataatcagcg gccctcaggg 240

gtccctgacc gcttctctgg ctccaagtct ggcacctcag cctccctggc catcagtggg 300

ctccggtccg aggatgaggc tgattattac tgtgcagcat gggatgacag cctgagtggt 360

tgggtgttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 237
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 237
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgata ttacactgac ccagactcca ctttctctgt ccgtctcccc tggacagccg 120

gcctccatct cctgcaagtc tagtcagagc ctcctgcaca gtgatggaag gaactatctg 180

tattggtacc tgcagaagcc aggccagcct ccacagctcc tgatctatga agtgtccaac 240

cggttctctg gactgccaga taggttcagt ggcagcgggt cagggacaga tttcacactg 300

aaaatcagcc gggtggaggc tgaggatgtt gggatttatt actgcatgca aagttttccg 360

cttccgctca ctttcggcgg agggaccaag gtggagatca aacgtacggt ggctgcacca 420

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 cccgtcacaa agagcttcaa caggggagag 720

tgt 723

<210> 238
<211> 714
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 238
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagt ctgtgttgac gcagccgccc tcagtgtctg cggccccagg acagaaggtc 120

accatctcct gctctggaag cagctccaac attgggaata ttatgtatc ctggtaccag 180

cagctcccag gaacagcccc caaactcctc atttatgaca ataataagcg accctcaggg 240

attcctgacc gattctctgg ctccaagtct ggcacgtcag ccaccctggg catcaccgga 300

ctccagactg gggacgaggc cgattattac tgcggaacat gggatagccg cctgagtgct 360

gtggttttcg gcggagggac caagctgacc gtcctaggtc agcccaaggc caaccccact 420

gtcactctgt tcccgccctc ctctgaggag ctccaagcca acaaggccac actagtgtgt 480

ctgatcagtg acttctaccc gggagctgtg acagtggcct ggaaggcaga tggcagcccc 540

gtcaaggcgg gagtggagac caccaaaccc tccaaacaga gcaacaacaa gtacgcggcc 600

agcagctacc tgagcctgac gcccgagcag tggaagtccc acagaagcta cagctgccag 660

gtcacgcatg aagggagcac cgtggagaag acagtggccc ctacagaatg ttca 714

<210> 239
<211> 708
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 239
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgaca tccagatgac ccagtctcca tcctccctgt ctgcatctgt aggagacaga 120

gtcaccatca cttgccgggc aagtcagggc attagaaagg atttaggctg gtatcagcag 180

aaaccaggga aagcccctaa gcgcctgatc tatggagcat ccagtttgca aagtggggtc 240

ccatcaaggt tcagcggcag tggatctggg acagaattca ctctcacaat cagcagcctg 300

cagcctgaag attttgcaac ttattactgt ctacagtata atagtttccc gtggacgttc 360

ggccaaggga ccaaggtgga aatcaaacgt acggtggctg caccatctgt cttcatcttc 420

ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480

ttctatccca gagaggccaa agtacagtgg aaggtggata acgccctcca atcgggtaac 540

tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600

ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660

cagggcctga gctcgcccgt cacaaagagc ttcaacaggg gagagtgt 708

<210> 240
<211> 705
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 240
atggaaaccc cagctcagct tctcttcctc ctgctactct ggctcccaga taccaccgga 60

gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120

ctctcctgca gggccagtca gagtgttagc agcggctact taacctggta ccagcagaaa 180

cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 240

gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 300

cctgaagatt ttgcagtgta ttactgtcag cagtatggta actcactgtg 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 cacccatcag 660

ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 241
<211> 705
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 241
atggaaaccc cagctcagct tctcttcctc ctgctactct ggctcccaga taccaccgga 60

gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 120

ctctcctgca gggccagtca gagtgttagc agcggctact taacctggta ccagcagaaa 180

cctggccagg ctcccagact 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 cacccatcag 660

ggcctgagct cgcccgtcac aaagagcttc aacaggggag agtgt 705

<210> 242
<211> 1434
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 242
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggaatctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct ttggcatgca ctgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttatat catttgatgg aagtattaag 240

tattctgtag actccgtgaa gggccgattc accatctcca gagacaattc aaagaacacg 300

ctgtttctgc aaatgaacag cctgcgagcc gaggacacgg ctgtgtatta ctgtgcgaga 360

gatcggctca attactatga tagtagtggt tattatcact acaaatacta cggtatggcc 420

gtctggggcc aagggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc 480

ttcccctgg 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 ccaaggtgga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg 780

tgcccagcac cacctgtggc aggaccgtca gtcttcctct tccccccaaa acccaaggac 840

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aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg 1020

caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa aggcctccca 1080

gcccccatcg agaaaaccat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac 1140

accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc 1200

aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac 1260

aactacaaga ccacacctcc catgctggac tccgacggct ccttcttcct ctacagcaag 1320

ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat 1380

gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa 1434

<210> 243
<211> 1437
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 243
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgagg tgcagctggt ggagtctggg ggaggcttgg taaagcctgg ggggtccctt 120

agactctcct gtgcagcctc tggattcact ttcagtaacg cctggatgag ctgggtccgc 180

caggctccag ggaaggggct ggagtgggtt ggccgtatta aaagcacaac tgatggtggg 240

acaacagact acgctgcacc cgtgaaaggc agattcacca tctcaagaga tgattcaaaa 300

aacacgctgt atctgcaaat gaacagcctg aaaaccgagg acacagccgt gtattactgt 360

accacagatc ggaccggata tagcatcagc tggtctagtt actactacta ctacggtatg 420

gacgtctggg gccaagggac cacggtcacc gtctctagtg cctccaccaa gggcccatcg 480

gtcttccccc tggcgccctg ctccaggagc acctccgaga gcacagcggc cctgggctgc 540

ctggtcaagg 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 tgatctcccg gacccctgag gtcacgtgcg tggtggtgga cgtgagccac 900

gaagaccccg aggtccagtt caactggtac gtggacggcg tggaggtgca taatgccaag 960

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aacaactaca agaccacacc tcccatgctg gactccgacg gctccttctt cctctacagc 1320

aagctcaccg tggacaagag caggtggcag caggggaacg tcttctcatg ctccgtgatg 1380

catgaggctc tgcacaacca ctacacgcag aagagcctct ccctgtctcc gggtaaa 1437

<210> 244

<211> 1434
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 244
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgagg tgcagctatt ggagtctggg ggaggcttgg tacagcctgg ggagtccctg 120

agactctcct gtgcagcctc tgggttcacc tttagcagct atgccatgag ctgggtccgc 180

caggctccag ggaaggggct ggagtgggtc tcagctatta gtggtagtgg tggtcgcaca 240

tactacgcag actccgtgaa gggccggttc accatctcca gagacaattc caagaacacg 300

ctgtatctgc aaatgaatag cctgagagcc gaggacacgg ccgtatatta ctgtgcgaaa 360

gatcaaaggg aggtagggcc gtatagcagt ggctggtacg actactacta cggtatggac 420

gtctggggcc aagggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc 480

ttcccctgg 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 ccaaggtgga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg 780

tgcccagcac cacctgtggc aggaccgtca gtcttcctct tccccccaaa acccaaggac 840

accctcatga tctcccggac ccctgaggtc acgtgcgtgg tggtggacgt gagccacgaa 900

gaccccgagg tccagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca 960

aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg 1020

caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa aggcctccca 1080

gcccccatcg agaaaaccat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac 1140

accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc 1200

aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac 1260

aactacaaga ccacacctcc catgctggac tccgacggct ccttcttcct ctacagcaag 1320

ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat 1380

gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa 1434

<210> 245
<211> 1434
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 245
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagttggt gcagtctggg gctgaggtga agaagcctgg ggcctcagtg 120

aaggtctcct gcaaggcttc tggatacacc ttcaccggct actatatgca ctgggtgcga 180

caggcccctg gacaagggct tgagtggatg ggatggatca accctaacag tggtggcaca 240

aactatgcac agaagtttca gggcagggtc accatgacca gggacacgtc catcagcaca 300

gcctacatgg agctgagcag gctgagatct gacgacacgg ccgtgtattt ctgtgcgaga 360

gatcaaatga gtattattat gcttcgggga gtttttcccc cttactatta cggtatggac 420

gtctggggcc aagggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc 480

ttcccctgg 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 ccaaggtgga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg 780

tgcccagcac cacctgtggc aggaccgtca gtcttcctct tccccccaaa acccaaggac 840

accctcatga tctcccggac ccctgaggtc acgtgcgtgg tggtggacgt gagccacgaa 900

gaccccgagg tccagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca 960

aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg 1020

caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa aggcctccca 1080

gcccccatcg agaaaaccat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac 1140

accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc 1200

aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac 1260

aactacaaga ccacacctcc catgctggac tccgacggct ccttcttcct ctacagcaag 1320

ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat 1380

gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa 1434

<210> 246
<211> 1431
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 246
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggagtctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct atggcatgca ctgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttattt catatgatgg aagtcatgaa 240

tcctatgcag actccgtgaa gggccgattc accatctcca gagacatttc caagaacacg 300

ctgtatctgc aaatgaacag cctgagagct gaggacacgg ctgtgtattt ctgtgcgaga 360

gagaggaaac gggttacgat gtctaccttа tattactact tctactacgg tatggacgtc 420

tggggccaag ggaccacggt caccgtctct agtgcctcca ccaagggccc atcggtcttc 480

cccctggcgc cctgctccag gagcacctcc gagagcacag cggccctggg ctgcctggtc 540

aaggactact tccccgaacc ggtgacggtg tcgtggaact caggcgctct gaccagcggc 600

gtgcacacct tcccagctgt cctacagtcc tcaggactct actccctcag cagcgtggtg 660

accgtgccct ccagcaactt cggcacccag acctacacct gcaacgtaga tcacaagccc 720

agcaacacca aggtggacaa gacagttgag cgcaaatgtt gtgtcgagtg cccaccgtgc 780

ccagcaccac ctgtggcagg accgtcagtc ttcctcttcc ccccaaaacc caaggacacc 840

ctcatgatct cccggacccc tgaggtcacg tgcgtggtgg tggacgtgag ccacgaagac 900

cccgaggtcc agttcaactg gtacgtggac ggcgtggagg tgcataatgc caagacaaag 960

ccacgggagg agcagttcaa cagcacgttc cgtgtggtca gcgtcctcac cgttgtgcac 1020

caggactggc tgaacggcaa ggagtacaag tgcaaggtct ccaacaaagg cctcccagcc 1080

cccatcgaga aaaccatctc caaaaccaaa gggcagcccc gagaaccaca ggtgtacacc 1140

ctgcccccat cccgggagga gatgaccaag aaccaggtca gcctgacctg cctggtcaaa 1200

ggcttctacc ccagcgacat cgccgtggag tgggagagca atgggcagcc ggagaacaac 1260

tacaagacca cacctcccat gctggactcc gacggctcct tcttcctcta cagcaagctc 1320

accgtggaca agagcaggtg gcagcagggg aacgtcttct catgctccgt gatgcatgag 1380

gctctgcaca accactacac gcagaagagc ctctccctgt ctccgggtaa a 1431

<210> 247
<211> 1434
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 247
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggaatctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct ttggcatgca ctgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttatat catttgatgg aagtattaag 240

tattctgtag actccgtgaa gggccgattc accatctcca gagacaattc aaagaacacg 300

ctgtttctgc aaatgaacag cctgcgagcc gaggacacgg ctgtgtatta ctgtgcgaga 360

gatcggctca attactatga tagtagtggt tattatcact acaaatacta cggtatggcc 420

gtctggggcc aagggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc 480

ttcccccctgg 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 ccaaggtgga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg 780

tgcccagcac cacctgtggc aggaccgtca gtcttcctct tcccccaaa acccaaggac 840

accctcatga tctcccggac ccctgaggtc acgtgcgtgg tggtggacgt gagccacgaa 900

gaccccgagg tccagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca 960

aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg 1020

caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa aggcctccca 1080

gcccccatcg agaaaaccat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac 1140

accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc 1200

aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac 1260

aactacaaga ccacacctcc catgctggac tccgacggct ccttcttcct ctacagcaag 1320

ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat 1380

gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa 1434

<210> 248
<211> 1407
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 248
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgagg tgcagctggt ggagtctggg ggaggcttgg taaagccagg gcggtccctg 120

agactctcct gtacagcttc tggattcacc tttggtgatt atgctatgag ctggttccgc 180

caggctccag ggaaggggct ggagtggata ggtttcatta gaagcagagc ttatggtggg 240

acaccagaat acgccgcgtc tgtgaaaggc agattcacca tctcaagaga tgattccaaa 300

accatcgcct atctgcaaat gaacagcctg aaaaccgagg acacagccgt gtatttctgt 360

gctagaggac ggggtattgc agctcgttgg gactactggg gccagggaac cctggtcacc 420

gtctctagtg cctccaccaa gggcccatcg gtcttccccc tggcgccctg ctccaggagc 480

acctccgaga gcacagcggc cctgggctgc ctggtcaagg actacttccc cgaaccggtg 540

acggtgtcgt ggaactcagg cgctctgacc agcggcgtgc acaccttccc agctgtccta 600

cagtcctcag gactctactc cctcagcagc gtggtgaccg tgccctccag caacttcggc 660

acccagacct acacctgcaa cgtagatcac aagcccagca acaccaaggt ggacaagaca 720

gttgagcgca aatgttgtgt cgagtgccca ccgtgcccag caccacctgt ggcaggaccg 780

tcagtcttcc tcttcccccc aaaacccaag gacaccctca tgatctcccg gacccctgag 840

gtcacgtgcg tggtggtgga cgtgagccac gaagaccccg aggtccagtt caactggtac 900

gtggacggcg tggaggtgca taatgccaag acaaagccac gggaggagca gttcaacagc 960

acgttccgtg tggtcagcgt cctcaccgtt gtgcaccagg actggctgaa cggcaaggag 1020

tacaagtgca aggtctccaa caaaggcctc ccagccccca tcgagaaaac catctccaaa 1080

accaaagggc agccccgaga accacaggtg tacaccctgc ccccatcccg ggaggagatg 1140

accaagaacc aggtcagcct gacctgcctg gtcaaaggct tctaccccag cgacatcgcc 1200

gtggagtggg agagcaatgg gcagccggag aacaactaca agaccacacc tcccatgctg 1260

gactccgacg gctccttctt cctctacagc aagctcaccg tggacaagag caggtggcag 1320

caggggaacg tcttctcatg ctccgtgatg catgaggctc tgcacaacca ctacacgcag 1380

aagagcctct ccctgtctcc gggtaaa 1407

<210> 249
<211> 1431
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 249
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggagtctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct atggcatgca ctgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttattt catatgatgg aagtcatgaa 240

tcctatgcag actccgtgaa gggccgattc accatctcca gagacatttc caagaacacg 300

ctgtatctgc aaatgaacag cctgagagct gaggacacgg ctgtgtattt ctgtgcgaga 360

gagaggaaac gggttacgat gtctacctta tattactact tctactacgg tatggacgtc 420

tggggccaag ggaccacggt caccgtctct agtgcctcca ccaagggccc atcggtcttc 480

cccctggcgc cctgctccag gagcacctcc gagagcacag cggccctggg ctgcctggtc 540

aaggactact tccccgaacc ggtgacggtg tcgtggaact caggcgctct gaccagcggc 600

gtgcacacct tcccagctgt cctacagtcc tcaggactct actccctcag cagcgtggtg 660

accgtgccct ccagcaactt cggcacccag acctacacct gcaacgtaga tcacaagccc 720

agcaacacca aggtggacaa gacagttgag cgcaaatgtt gtgtcgagtg cccaccgtgc 780

ccagcaccac ctgtggcagg accgtcagtc ttcctcttcc ccccaaaacc caaggacacc 840

ctcatgatct cccggacccc tgaggtcacg tgcgtggtgg tggacgtgag ccacgaagac 900

cccgaggtcc agttcaactg gtacgtggac ggcgtggagg tgcataatgc caagacaaag 960

ccacgggagg agcagttcaa cagcacgttc cgtgtggtca gcgtcctcac cgttgtgcac 1020

caggactggc tgaacggcaa ggagtacaag tgcaaggtct ccaacaaagg cctcccagcc 1080

cccatcgaga aaaccatctc caaaaccaaa gggcagcccc gagaaccaca ggtgtacacc 1140

ctgccccat cccgggagga gatgaccaag aaccaggtca gcctgacctg cctggtcaaa 1200

ggcttctacc ccagcgacat cgccgtggag tgggagagca atgggcagcc ggagaacaac 1260

tacaagacca cacctcccat gctggactcc gacggctcct tcttcctcta cagcaagctc 1320

accgtggaca agagcaggtg gcagcagggg aacgtcttct catgctccgt gatgcatgag 1380

gctctgcaca accactacac gcagaagagc ctctccctgt ctccgggtaa a 1431

<210> 250
<211> 1434
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 250
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggaatctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct ttggcatgca ctgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttatat catttgatgg aagtattaag 240

tattctgtag actccgtgaa gggccgattc accatctcca gagacaattc aaagaacacg 300

ctgtttctgc aaatgaacag cctgcgagcc gaggacacgg ctgtgtatta ctgtgcgaga 360

gatcggctca attactatga tagtagtggt tattatcact acaaatacta cggtatggcc 420

gtctggggcc aagggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc 480

ttcccctgg cgccctgctc caggagcacc tccgagagca cagcggccct gggctgcctg 540

gtcaaggact acttccccga accggtgacg gtgtcgtgga actcaggcgc tctgaccagc 600

ggcgtgcaca ccttcccagc tgtcctacag tcctcaggac tctactccct cagcagcgtg 660

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cccagcaaca ccaaggtgga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg 780

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gaccccgagg tccagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca 960

aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg 1020

caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa aggcctccca 1080

gccccatcg agaaaaccat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac 1140

accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc 1200

aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac 1260

aactacaaga ccacacctcc catgctggac tccgacggct ccttcttcct ctacagcaag 1320

ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat 1380

gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa 1434

<210> 251
<211> 1437
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 251
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgagg tgcagctggt ggagtctggg ggaggcttgg taaagcctgg ggggtccctt 120

agactctcct gtgcagcctc tggattcact ttcagtaacg cctggatgag ctgggtccgc 180

caggctccag ggaaggggct ggagtgggtt ggccgtatta aaagcaaaac tgatggtggg 240

acaacagact acactgcacc cgtgaaaggc agattcacca tctcaagaga tgattcaaaa 300

aacacgctgt atctgcaaat gaatagcctg aaagccgagg acacagccgt gtattactgt 360

accacagatc ggaccgggta tagcatcagc tggtctagtt actactacta ctacggtatg 420

gacgtctggg gccaagggac cacggtcacc gtctctagtg cctccaccaa gggcccatcg 480

gtcttccccc tggcgccctg ctccaggagc acctccgaga gcacagcggc cctgggctgc 540

ctggtcaagg 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 tgatctcccg gacccctgag gtcacgtgcg tggtggtgga cgtgagccac 900

gaagaccccg aggtccagtt caactggtac gtggacggcg tggaggtgca taatgccaag 960

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aagctcaccg tggacaagag caggtggcag caggggaacg tcttctcatg ctccgtgatg 1380

catgaggctc tgcacaacca ctacacgcag aagagcctct ccctgtctcc gggtaaa 1437

<210> 252
<211> 1425
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 252
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtcagg tgcagctggt gcagtctggg gctgaggtga agaagcctgg ggcctcagtg 120
aaggtctcct gcaaggcttc tggatacacc ttcaccgact actatatgta ctgggtgcga 180
caggcccctg gacaagggct tgagtggatg ggatggatca gccctaatag tggtggcaca 240
aactatgccc agaagtttca gggcagggtc accatgacca gggacacgtc tatcagcaca 300
gcctacatgg agctgagtag gctgagatct gacgacacgg ccgtgtatta ctgtgtgaga 360
ggaggatata gtggctacgc tgggctctac tcccactact acggtatgga cgtctggggc 420
caagggacca cggtcaccgt ctctagtgcc 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 tagatcacaa gcccagcaac 720
accaaggtgg acaagacagt tgagcgcaaa tgttgtgtcg agtgcccacc gtgcccagca 780
ccacctgtgg caggaccgtc agtcttcctc ttccccccaa aacccaagga caccctcatg 840
atctcccgga ccctgaggt cacgtgcgtg gtggtggacg tgagccacga agaccccgag 900
gtccagttca actggtacgt ggacggcgtg gaggtgcata atgccaagac aaagccacgg 960
gaggagcagt tcaacagcac gttccgtgtg gtcagcgtcc tcaccgttgt gcaccaggac 1020
tggctgaacg gcaaggagta caagtgcaag gtctccaaca aaggcctccc agcccccatc 1080
gagaaaacca tctccaaaac caaagggcag ccccgagaac cacaggtgta caccctgccc 1140
ccatcccggg aggagatgac caagaaccag gtcagcctga cctgcctggt caaaggcttc 1200
taccccagcg 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> 253
<211> 1437
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 253
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60
cgctgtgagg tacagctggt ggagtctggg ggaggcttgg taaagcctgg ggggtccctc 120
agactctcct gtgcagcctc tggattcact ttcggtaacg cctggatgag ctgggtccgc 180
caggctccag ggaaggggct ggagtgggtt ggccgtatta aaagcaaaac tgatggtggg 240
acaacagact acgctgcacc cgtgaaaggc agattcacca tctcaagaga tgattcaaaa 300
aacacgctgt atctgcaaat gaacagcctg aaaaccgagg acacagccgt gtatttctgt 360
accacagatc ggaccgggta tagcatcagc tggtctagtt actactacta ctacggtatg 420
gacgtctggg gccaagggac cacggtcacc gtctctagtg cctccaccaa gggcccatcg 480
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ctggtcaagg 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 tgatctcccg gacccctgag gtcacgtgcg tggtggtgga cgtgagccac 900
gaagaccccg aggtccagtt caactggtac gtggacggcg tggaggtgca taatgccaag 960
acaaagccac gggaggagca gttcaacagc acgttccgtg tggtcagcgt cctcaccgtt 1020
gtgcaccagg actggctgaa cggcaaggag tacaagtgca aggtctccaa caaaggcctc 1080
ccagccccca tcgagaaaac catctccaaa accaaagggc agccccgaga accacaggtg 1140
tacaccctgc ccccatcccg 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> 254
<211> 1437
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 254
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgagg tacagctggt ggagtctggg ggaggcttgg taaagcctgg ggggtccctt 120

agactctcct gtgcagcctc tggattcact ttcggtaacg cctggatgag ctgggtccgc 180

caggctccag ggaaggggct ggagtgggtt ggccgtatta aaagcaaaac tgatggtggg 240

acaacagact acgctgcacc cgtgaaaggc agattcacca tctcaagaga tgattcaaaa 300

aacacgctgt atctgcaaat gaacagcctg aaaaccgagg acacagccgt gtattactgt 360

accacagatc ggaccgggta tagcatcagc tggtctagtt actactacta ctacggtatg 420

gacgtctggg gccaagggac cacggtcacc gtctctagtg cctccaccaa gggcccatcg 480

gtcttccccc tggcgccctg ctccaggagc acctccgaga gcacagcggc cctgggctgc 540

ctggtcaagg 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 tgatctcccg gacccctgag gtcacgtgcg tggtggtgga cgtgagccac 900

gaagaccccg aggtccagtt caactggtac gtggacggcg tggaggtgca taatgccaag 960

acaaagccac gggaggagca gttcaacagc acgttccgtg tggtcagcgt cctcaccgtt 1020

gtgcaccagg actggctgaa cggcaaggag tacaagtgca aggtctccaa caaaggcctc 1080

ccagccccca tcgagaaaac catctccaaa accaaagggc agccccgaga accacaggtg 1140

tacaccctgc ccccatcccg 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> 255
<211> 1431
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 255
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggagtctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct atggcatgca ctgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttattt catatgatgg aagtcatgaa 240

tcctatgcag actccgtgaa gggccgattc accatctcca gagacatttc caagaacacg 300

ctgtatctgc aaatgaacag cctgagagct gaggacacgg ctgtgtattt ctgtgcgaga 360

gagaggaaac gggttacgat gtctacctta tattactact tctactacgg tatggacgtc 420

tggggccaag ggaccacggt caccgtctct agtgcctcca ccaagggccc atcggtcttc 480

cccctggcgc cctgctccag gagcacctcc gagagcacag cggccctggg ctgcctggtc 540

aaggactact tccccgaacc ggtgacggtg tcgtggaact caggcgctct gaccagcggc 600

gtgcacacct tcccagctgt cctacagtcc tcaggactct actccctcag cagcgtggtg 660

accgtgccct ccagcaactt cggcacccag acctacacct gcaacgtaga tcacaagccc 720

agcaacacca aggtggacaa gacagttgag cgcaaatgtt gtgtcgagtg cccaccgtgc 780

ccagcaccac ctgtggcagg accgtcagtc ttcctcttcc ccccaaaacc caaggacacc 840

ctcatgatct cccggacccc tgaggtcacg tgcgtggtgg tggacgtgag ccacgaagac 900

cccgaggtcc agttcaactg gtacgtggac ggcgtggagg tgcataatgc caagacaaag 960

ccacgggagg agcagttcaa cagcacgttc cgtgtggtca gcgtcctcac cgttgtgcac 1020

caggactggc tgaacggcaa ggagtacaag tgcaaggtct ccaacaaagg cctcccagcc 1080

cccatcgaga aaaccatctc caaaaccaaa gggcagcccc gagaaccaca ggtgtacacc 1140

ctgcccccat cccgggagga gatgaccaag aaccaggtca gcctgacctg cctggtcaaa 1200

ggcttctacc ccagcgacat cgccgtggag tgggagagca atgggcagcc ggagaacaac 1260

tacaagacca cacctcccat gctggactcc gacggctcct tcttcctcta cagcaagctc 1320

accgtggaca agagcaggtg gcagcagggg aacgtcttct catgctccgt gatgcatgag 1380

gctctgcaca accactacac gcagaagagc ctctccctgt ctccgggtaa a 1431

<210> 256
<211> 1434
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 256
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtcagg tgcagctggt ggaatctggg ggaggcgtgg tccagcctgg gaggtccctg 120

agactctcct gtgcagcctc tggattcacc ttcagtagct ttggcatgca ttgggtccgc 180

caggctccag gcaaggggct ggagtgggtg gcagttatat catttgatgg aagtattaag 240

tactctgtag actccgtgaa gggccgattc accatctcca gagacaattc aaagaacacg 300

ctgtttctgc aaatgaacag cctgcgagcc gaggacacgg ctgtgtatta ctgtgcgaga 360

gatcggctca attactatga tagtagtggt tattatcact acaaatacta cggtctggcc 420

gtctggggcc aagggaccac ggtcaccgtc tctagtgcct ccaccaaggg cccatcggtc 480

ttcccctgg 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 ccaaggtgga caagacagtt gagcgcaaat gttgtgtcga gtgcccaccg 780

tgcccagcac cacctgtggc aggaccgtca gtcttcctct tcccccaaa acccaaggac 840

accctcatga tctcccggac ccctgaggtc acgtgcgtgg tggtggacgt gagccacgaa 900

gaccccgagg tccagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca 960

aagccacggg aggagcagtt caacagcacg ttccgtgtgg tcagcgtcct caccgttgtg 1020

caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa aggcctccca 1080

gcccccatcg agaaaaccat ctccaaaacc aaagggcagc cccgagaacc acaggtgtac 1140

accctgcccc catcccggga ggagatgacc aagaaccagg tcagcctgac ctgcctggtc 1200

aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac 1260

aactacaaga ccacacctcc catgctggac tccgacggct ccttcttcct ctacagcaag 1320

ctcaccgtgg acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat 1380

gaggctctgc acaaccacta cacgcagaag agcctctccc tgtctccggg taaa 1434

<210> 257
<211> 1437
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 257
atggacatga gggtgcccgc tcagctcctg gggctcctgc tgctgtggct gagaggtgcg 60

cgctgtgagg tgcagctggt ggagtctggg ggaggcctgg tcaagcctgg ggggtccctg 120

agactctcct gtgcagcctc tggatacacc ttcagtacct atagcatgaa ctgggtccgc 180

caggctccag ggaaggggct ggagtgggtc tcatccatta gtagtagtag tagttacaga 240

tattacgcag actcagtgaa gggccgattc accatctcca gagacaacgc caagaactca 300

ctgtatctgc aaatgagtag cctgagagcc gaggacacgg ctgtgtatta ctgtgcgaga 360

gaaggggtgt ctggcagttc gccgtatagc atcagctggt acgactacta ttacggtatg 420

gacgtctggg gccaagggac cacggtcacc gtctctagtg cctccaccaa gggcccatcg 480

gtcttccccc tggcgccctg ctccaggagc acctccgaga gcacagcggc cctgggctgc 540

ctggtcaagg 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 tgatctcccg gacccctgag gtcacgtgcg tggtggtgga cgtgagccac 900

gaagaccccg aggtccagtt caactggtac gtggacggcg tggaggtgca taatgccaag 960

acaaagccac gggaggagca gttcaacagc acgttccgtg tggtcagcgt cctcaccgtt 1020

gtgcaccagg actggctgaa cggcaaggag tacaagtgca aggtctccaa caaaggcctc 1080

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tacaccctgc ccccatcccg 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> 258
<211> 1422
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 258
atggacatga gggtgcccgc 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

gcgggggta tagcagcagc tggcctctac tactactacg gtatggacgt ctggggccaa 420

gggaccacgg tcaccgtctc tagtgcctcc accaagggcc catcggtctt ccccctggcg 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 gcgcaaatgt tgtgtcgagt gcccaccgtg cccagcacca 780

cctgtggcag gaccgtcagt cttcctcttc cccccaaaac ccaaggacac cctcatgatc 840

tcccggaccc ctgaggtcac gtgcgtggtg 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 gcctggtcaa aggcttctac 1200

cccagcgaca tcgccgtgga gtgggagagc aatgggcagc cggagaacaa ctacaagacc 1260

acacctccca tgctggactc cgacggctcc ttcttcctct acagcaagct caccgtggac 1320

aagagcaggt ggcagcaggg gaacgtcttc tcatgctccg tgatgcatga ggctctgcac 1380

aaccactaca cgcagaagag cctctccctg tctccgggta aa 1422

<210> 259
<211> 981
<212> DNA
<213> Homo sapiens

<400> 259
gctagcacca agggcccatc ggtcttcccc ctggcgccct gctccaggag cacctccgag 60

agcacagcgg ccctgggctg cctggtcaag gactacttcc ccgaaccggt gacggtgtcg 120

tggaactcag gcgctctgac cagcggcgtg cacaccttcc cagctgtcct acagtcctca 180

ggactctact ccctcagcag cgtggtgacc gtgccctcca gcaacttcgg cacccagacc 240

tacacctgca acgtagatca caagcccagc aacaccaagg tggacaagac agttgagcgc 300

aaatgttgtg tcgagtgccc accgtgccca gcaccacctg tggcaggacc gtcagtcttc 360

ctcttccccc caaaacccaa ggacaccctc atgatctccc ggacccctga ggtcacgtgc 420

gtggtggtgg acgtgagcca cgaagacccc gaggtccagt tcaactggta cgtggacggc 480

gtggaggtgc ataatgccaa gacaaagcca cgggaggagc agttcaacag cacgttccgt 540

gtggtcagcg tcctcaccgt tgtgcaccag gactggctga acggcaagga gtacaagtgc 600

aaggtctcca acaaaggcct cccagccccc atcgagaaaa ccatctccaa aaccaaaggg 660

cagccccgag aaccacaggt gtacaccctg cccccatccc gggaggagat gaccaagaac 720

caggtcagcc tgacctgcct ggtcaaaggc ttctacccca gcgacatcgc cgtggagtgg 780

gagagcaatg ggcagccgga gaacaactac aagaccacac ctcccatgct ggactccgac 840

ggctccttct tcctctacag caagctcacc gtggacaaga gcaggtggca gcaggggaac 900

gtcttctcat gctccgtgat gcatgaggct ctgcacaacc actacacgca gaagagcctc 960

tccctgtctc cgggtaaatg a 981

<210> 260
<211> 324
<212> DNA
<213> Homo sapiens

<400> 260
cgtacggtgg ctgcaccatc tgtcttcatc ttcccgccat ctgatgagca gttgaaatct 60

ggaactgcct ctgttgtgtg cctgctgaat aacttctatc ccagagaggc caaagtacag 120

tggaaggtgg ataacgccct ccaatcgggt aactcccagg agagtgtcac agagcaggac 180

agcaaggaca gcacctacag cctcagcagc accctgacgc tgagcaaagc agactacgag 240

aaacacaaag tctacgcctg cgaagtcacc catcagggcc tgagctcgcc cgtcacaaag 300

agcttcaaca ggggagagtg ttag 324

<210> 261
<211> 321
<212> DNA
<213> Homo sapiens

<400> 261
ggtcagccca aggccaaccc cactgtcact ctgttcccgc cctcctctga ggagctccaa 60

gccaacaagg ccacactagt gtgtctgatc agtgacttct acccgggagc tgtgacagtg 120

gcctggaagg cagatggcag ccccgtcaag gcgggagtgg agaccaccaa accctccaaa 180

cagagcaaca acaagtacgc ggccagcagc tacctgagcc tgacgcccga gcagtggaag 240

tcccacagaa gctacagctg ccaggtcacg catgaaggga gcaccgtgga gaagacagtg 300

gcccctacag aatgttcata g 321