SEQUENCE LISTING

<110> BELLICUM PHARMACEUTICALS, INC.

<120> DUAL CONTROLS FOR THERAPEUTIC CELL ACTIVATION OR ELIMINATION

<130> BEL-2025-PC

<140> PCT/US2016/066371
<141> 2016-12-13

<150> 62/267,277
<151> 2015-12-14

<160> 2364

<170> PatentIn version 3.5

<210> 1
<211> 590
<212> DNA
<213> Artificial Sequence

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

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ctgaatatgg gccaaacagg atatctgtgg taagcagttc ctgccccggc tcagggccaa 180

gaacagatgg aacagctgaa tatgggccaa acaggatatc tgtggtaagc agttcctgcc 240

ccggctcagg gccaagaaca gatggtcccc agatgcggtc cagccctcag cagtttctag 300

agaaccatca gatgtttcca gggtgcccca aggacctgaa atgaccctgt gccttatttg 360

aactaaccaa tcagttcgct tctcgcttct gttcgcgcgc ttatgctccc cgagctcaat 420

aaaagagccc acaacccctc actcggggcg ccagtcctcc gattgactga gtcgcccggg 480

tacccgtgta tccaataaac cctcttgcag ttgcatccga cttgtggtct cgctgttcct 540

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<211> 321
<212> DNA
<213> Homo sapiens

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gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

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<210> 3
<211> 107
<212> PRT
<213> Homo sapiens

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            20   25   30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

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

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
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<210> 4
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
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<211> 6
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 5
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<210> 6
<211> 6
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
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<210> 7
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<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
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<210> 8
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<220>
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<213> Artificial Sequence

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

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35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Gln Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

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<210> 10
<211> 9
<212> DNA
<213> Artificial Sequence

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

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<210> 11
<211> 3
<212> PRT
<213> Artificial Sequence

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

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<210> 12
<211> 57
<212> DNA
<213> Thosea asigna virus

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<210> 13
<211> 19
<212> PRT
<213> Thosea asigna virus

<400> 13
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Pro Gly Pro

<210> 14
<211> 999
<212> DNA
<213> Homo sapiens

<400> 14
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gggacctcag atggccccac tcagcagctg acctggtctc gggagtcccc gcttaaaccc 180

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tcagagggcc ccagctcccc ttccgggaag ctcatgagcc ccaagctgta tgtgtgggcc 480

aaagaccgcc ctgagatctg ggagggagag cctccgtgtc tcccaccgag ggacagcctg 540

aaccagagcc tcagccagga cctcaccatg gcccctggct ccacactctg gctgtcctgt 600

ggggtacccc ctgactctgt gtccaggggc cccctctcct ggacccatgt gcaccccaag 660

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<210> 15
<211> 333
<212> PRT
<213> Homo sapiens

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20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp

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Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
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Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
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<210> 16
<211> 590
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
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ggaaaaatac ataactgaga atagagaagt tcagatcaag gtcaggaaca gatggaacag      120
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ctgaatatgg gccaaacagg atatctgtgg taagcagttc ctgccccggc tcagggccaa 180

gaacagatgg aacagctgaa tatgggccaa acaggatatc tgtggtaagc agttcctgcc 240

ccggctcagg gccaagaaca gatggtcccc agatgcggtc cagccctcag cagtttctag 300

agaaccatca gatgtttcca gggtgcccca aggacctgaa atgaccctgt gccttatttg 360

aactaaccaa tcagttcgct tctcgcttct gttcgcgcgc ttctgctccc cgagctcaat 420

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tacccgtgta tccaataaac cctcttgcag ttgcatccga cttgtggtct cgctgttcct 540

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<210> 17
<211> 8622
<212> DNA
<213> Artificial Sequence

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

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ctgaatatgg gccaaacagg atatctgtgg taagcagttc ctgccccggc tcagggccaa 180

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agaaccatca gatgtttcca gggtgcccca aggacctgaa atgaccctgt gccttatttg 360

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cgtccgggat cgggagaccc ctgcccaggg accaccgacc caccaccggg aggtaagctg 660

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aaggaagagt atgagtattc aacatttccg tgtcgcccct attccctttt ttgcggcatt 6240
ttgccttcct gtttttgctc acccagaaac gctggtgaaa gtaaaagatg ctgaagatca 6300
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gaatgacttg gttgagtact caccagtcac agaaaagcat cttacggatg gcatgacagt 6540
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gacaacgatc ggaggaccga aggagctaac cgcttttttg cacaacatgg gggatcatgt 6660
aactcgcctt gatcgttggg aaccggagct gaatgaagcc ataccaaacg acgagcgtga 6720
caccacgatg cctgtagcaa tggcaacaac gttgcgcaaa ctattaactg gcgaactact 6780
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agaaaagatc aaaggatctt cttgagatcc tttttttctg cgcgtaatct gctgcttgca 7260
aacaaaaaaa ccaccgctac cagcggtggt ttgtttgccg gatcaagagc taccaactct 7320
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gccgtagtta ggccaccact tcaagaactc tgtagcaccg cctacatacc tcgctctgct 7440

aatcctgtta ccagtggctg ctgccagtgg cgataagtcg tgtcttaccg ggttggactc 7500

aagacgatag ttaccggata aggcgcagcg gtcgggctga acgggggttt cgtgcacaca 7560

gcccagcttg gagcgaacga cctacaccga actgagatac ctacagcgtg agcattgaga 7620

aagcgccacg cttcccgaag ggagaaaggc ggacaggtat ccggtaagcg gcagggtcgg 7680

aacaggagag cgcacgaggg agcttccagg gggaaacgcc tggtatcttt atagtcctgt 7740

cgggtttcgc cacctctgac ttgagcgtcg atttttgtga tgctcgtcag gggggcggag 7800

cctatggaaa aacgccagca acgcggcctt tttacggttc ctggcctttt gctggccttt 7860

tgctcacatg ttctttcctg cgttatcccc tgattctgtg gataaccgta ttaccgcctt 7920

tgagtgagct gataccgctc gccgcagccg aacgaccgag cgcagcgagt cagtgagcga 7980

ggaagcggaa gagcgcccaa tacgcaaacc gcctctcccc gcgcgttggc cgattcatta 8040

atgcagctgg cacgacaggt ttcccgactg gaaagcgggc agtgagcgca acgcaattaa 8100

tgtgagttag ctcactcatt aggcacccca ggctttacac tttatgcttc cggctcgtat 8160

gttgtgtgga attgtgagcg gataacaatt tcacacagga aacagctatg accatgatta 8220

cgccaagctt tgctcttagg agtttcctaa tacatcccaa actcaaatat ataaagcatt 8280

tgacttgttc tatgccctag ggggcggggg gaagctaagc cagcttttt taacatttaa 8340

aatgttaatt ccattttaaa tgcacagatg tttttatttc ataagggttt caatgtgcat 8400

gaatgctgca atattcctgt taccaaagct agtataaata aaaatagata aacgtggaaa 8460

ttacttagag tttctgtcat taacgtttcc ttcctcagtt gacaacataa atgcgctgct 8520

gagcaagcca gtttgcatct gtcaggatca atttcccatt atgccagtca tattaattac 8580

tagtcaatta gttgattttt atttttgaca tatacatgtg aa 8622

<210> 18
<211> 678
<212> DNA
<213> Artificial Sequence

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

<400> 18
ctcgagggcg tccaagtcga aaccattagt cccggcgatg gcagaacatt tcctaaaagg 60

ggacaaacat gtgtcgtcca ttatacaggc atgttggagg acggcaaaaa ggtggacagt 120

agtagagatc gcaataaacc tttcaaattc atgttgggaa aacaagaagt cattagggga 180

tgggaggagg gcgtggctca aatgtccgtc ggccaacgcg ctaagctcac catcagcccc 240

gactacgcat acggcgctac cggacatccc ggaattattc cccctcacgc taccttggtg 300

tttgacgtcg aactgttgaa gctcgaagtc gagggagtgc aggtggaaac catctcccca 360

ggagacgggc gcaccttccc caagcgcggc cagacctgcg tggtgcacta caccgggatg 420

cttgaagatg gaaagaaagt tgattcctcc cgggacagaa acaagccctt taagtttatg 480

ctaggcaagc aggaggtgat ccgaggctgg gaagaagggg ttgcccagat gagtgtgggt 540

cagagagcca aactgactat atctccagat tatgcctatg gtgccactgg gcacccaggc 600

atcatcccac cacatgccac tctcgtcttc gatgtggagc ttctaaaact ggaatctggc 660

ggtggatccg gagtcgag 678

<210> 19
<211> 222
<212> PRT
<213> Artificial Sequence

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

<400> 19
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu Val Glu Gly Val Gln
100 105 110

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

Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp Gly Lys Lys
130 135 140

Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe Met Leu Gly
145 150 155 160

Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala Gln Met Ser
165 170 175

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

Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr Leu Val Phe

195 200 205

Asp Val Glu Leu Leu Lys Leu Glu Ser Gly Gly Gly Ser Gly
210 215 220

<210> 20
<211> 1200
<212> DNA
<213> Artificial Sequence

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

<400> 20
atgctcgagg gagtgcaggt ggagactatc tccccaggag acgggcgcac cttccccaag 60

cgcggccaga cctgcgtggt gcactacacc gggatgcttg aagatggaaa gaaagttgat 120

tcctcccggg acagaaacaa gcccctttaag tttatgctag gcaagcagga ggtgatccga 180

ggctgggaag aaggggttgc ccagatgagt gtgggtcaga gagccaaact gactatatct 240

ccagattatg cctatggtgc cactgggcac ccaggcatca tcccaccaca tgccactctc 300

gtcttcgatg tggagcttct aaaactggaa tctggcggtg gatccggagt cgacggattt 360

ggtgatgtcg gtgctcttga gagtttgagg ggaaatgcag atttggctta catcctgagc 420

atggagccct gtggccactg cctcattatc aacaatgtga acttctgccg tgagtccggg 480

ctccgcaccc gcactggctc caacatcgac tgtgagaagt tgcggcgtcg cttctcctcg 540

ctgcatttca tggtggaggt gaagggcgac ctgactgcca agaaaatggt gctggctttg 600

ctggagctgg cgcggcagga ccacggtgct ctggactgct gcgtggtggt cattctctct 660

cacggctgtc aggccagcca cctgcagttc ccaggggctg tctacggcac agatggatgc 720

cctgtgtcgg tcgagaagat tgtgaacatc ttcaatggga ccagctgccc cagcctggga 780

gggaagccca agctcttttt catccaggcc tgtggtgggg agcagaaaga ccatgggttt 840

gaggtggcct ccacttcccc tgaagacgag tcccctggca gtaaccccga gccagatgcc 900

accccgttcc aggaaggttt gaggaccttc gaccagctgg acgccatatc tagtttgccc 960

acacccagtg acatctttgt gtcctactct actttcccag gttttgtttc ctggagggac 1020

cccaagagtg gctcctggta cgttgagacc ctggacgaca tctttgagca gtgggctcac 1080

tctgaagacc tgcagtccct cctgcttagg gtcgctaatg ctgtttcggt gaaagggatt 1140

tataaacaga tgcctggttg ctttaatttc ctccggaaaa aacttttctt taaaacatca 1200

<210> 21
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 21
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

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

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
            100   105

<210> 22
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 22
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1   5   10   15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
            20   25   30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
        35   40   45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
    50   55   60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65   70   75   80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
                85   90   95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
            100   105   110

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

115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
275 280

<210> 23
<211> 846
<212> DNA
<213> Artificial Sequence

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

<400> 23
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggccgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatca 846

<210> 24
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 24
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

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Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
        275                 280
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<210> 25
<211> 846
<212> DNA
<213> Artificial Sequence

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

<400> 25

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ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc       60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag      120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc      180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg      240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt      300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat      360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc      420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat      480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca      540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt      600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg      660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg      720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa      780

gggatttata aacagatgcc tggttgcttt cagttcctcc ggaaaaaact tttctttaaa      840
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<210> 26
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 26
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
275 280

<210> 27
<211> 846
<212> DNA
<213> Artificial Sequence

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

<400> 27
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggccgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt cagttcctcc ggaaaaaact tttctttaaa 840

acatca 846

<210> 28
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 28
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
275 280

<210> 29
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 29
ggcgttcaag tagaaacaat cagcccagga gacggaagga ctttccccaa acgaggccaa 60

acatgcgtag ttcattatac tgggatgctc gaagatggaa aaaaagtaga tagtagtaga 120

gaccgaaaca aaccatttaa atttatgttg ggaaaacaag aagtaataag gggctgggaa 180

gaaggtgtag cacaaatgtc tgttggccag cgcgcaaaac tcacaatttc tcctgattat 240

gcttacggag ctaccggcca ccccggcatc ataccccctc atgccacact ggtgtttgac 300

gtcgaattgc tcaaactgga a 321

<210> 30
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 30
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 31
<211> 321

<212> DNA
<213> Artificial Sequence

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

<400> 31
ggagtgcagg tggagacgat tagtcctggg gatgggagaa cctttccaaa gcgcggtcag 60

acctgtgttg tccactacac cggtatgctg gaggacggga agaaggtgga ctcttcacgc 120

gatcgcaata agcctttcaa gttcatgctc ggcaagcagg aggtgatccg ggggtgggag 180

gagggcgtgg ctcagatgtc ggtcgggcaa cgagcgaagc ttaccatctc acccgactac 240

gcgtatgggg caacggggca tccgggaatt atccctcccc acgctacgct cgtattcgat 300

gtggagctct tgaagcttga g 321

<210> 32
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 32
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 33
<211> 1002
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 33
atgccccctc ctagactgct gtttttcctg ctctttctca ccccaatgga agttagacct 60

gaggaaccac tggtcgttaa agtggaagaa ggtgataatg ctgtcctcca atgccttaaa 120

gggaccagcg acggaccaac gcagcaactg acttggagcc gggagtcccc tctcaagccg 180

tttctcaagc tgtcacttgg cctgccaggt cttggtattc acatgcgccc ccttgccatt 240

tggctcttca tattcaatgt gtctcaacaa atgggtggat tctacctttg ccagcccggc 300

ccccttctg agaaagcttg gcagcctgga tggaccgtca atgttgaagg ctccggtgag 360

ctgtttagat ggaatgtgag cgaccttggc ggactcggtt gcggactgaa aaataggagc 420

tctgaaggac cctcttctcc ctccggtaag ttgatgtcac ctaagctgta cgtgtgggcc 480

aaggaccgcc ccgaaatctg ggagggcgag cctccatgcc tgccgcctcg cgattcactg 540

aaccagtctc tgtcccagga tctcactatg gcgcccggat ctactctttg gctgtcttgc 600

ggcgttcccc cagatagcgt gtcaagagga cctctgagct ggacccacgt acaccctaag 660

ggccctaaga gcttgttgag cctggaactg aaggacgaca gacccgcacg cgatatgtgg 720

gtaatggaga ccggccttct gctccctcgc gctaccgcac aggatgcagg gaaatactac 780

tgtcatagag ggaatctgac tatgagcttt catctcgaaa ttacagcacg gcccgttctt 840

tggcattggc tcctccggac tggaggctgg aaggtgtctg ccgtaacact cgcttacttg 900

atttttgcc tgtgtagcct ggttgggatc ctgcatcttc agcgagccct tgtattgcgc 960

cgaaaaagaa aacgaatgac tgaccctaca cgacgattct ga 1002

<210> 34
<211> 333
<212> PRT
<213> Artificial Sequence

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

<400> 34
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
180 185 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
195 200 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225 230 235 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
245 250 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
260 265 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
275 280 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 35
<211> 330
<212> DNA
<213> Artificial Sequence

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

<400> 35
atgctggagg gagtgcaggt ggagactatt agccccggag atggcagaac attccccaaa 60

agaggacaga cttgcgtcgt gcattatact ggaatgctgg aagacggcaa gaaggtggac 120

agcagccggg accgaaacaa gcccttcaag ttcatgctgg ggaagcagga agtgatccgg 180

ggctgggagg aaggagtcgc acagatgtca gtgggacaga gggccaaact gactattagc 240

ccagactacg cttatggagc aaccggccac cccgggatca ttccccctca tgctacactg 300

gtcttcgatg tggagctgct gaagctggaa 330

<210> 36
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 36
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 37
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 37

agcggaggag gatccgga 18

<210> 38
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 38
Ser Gly Gly Gly Ser Gly
1 5

<210> 39
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 39
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttccagt ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 40
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 40
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 41
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 41
ccgcgg 6

<210> 42
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 42
Pro Arg
1

<210> 43
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 43
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 44
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 44
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 45
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 45
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

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Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 46
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 46
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttcaact ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 47
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 47
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg

180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 48
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 48
gtcgacggat ttggtgatgt cggtgctctt gaggctttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 49
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 49
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ala Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

```
Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 50
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 50
gtcgacggat ttggtgatgt cggtgctctt gaggacttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 51
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 51
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Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Asp Leu Arg Gly Asn
1               5                   10                  15
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Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20                  25                  30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 52
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 52
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc gccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 53
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 53
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ala Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

```
Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 54
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 54
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct       60
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tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctccg cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 55
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 55
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ala
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

```
Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 56
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 56
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctccg acctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 57
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 57
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Asp
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro

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                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 58
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 58
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg ccgcgggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 59
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 59
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Ala Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 60
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 60
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg gcaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 61
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 61
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Gly Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 62
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 62
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccgccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 63
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 63
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

```
Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Ala Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285

<210> 64
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 64
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg cctgcccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 65
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 65
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

```
Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Cys Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 66
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 66
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct       60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc      120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt      180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg      240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg      300
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gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg cctccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 67
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 67
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys

```
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Ser Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 68
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 68
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacca aggaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 69
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 69
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Lys Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

```
Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 70
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 70
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcaagcagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 71
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 71
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Lys Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 72
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 72
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcaggcagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 73
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 73
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Arg Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
```

<210> 74
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 74
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcggccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 75
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 75
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

```
Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Gly Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 76
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 76
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct       60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc      120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt      180
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cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgacaagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 77
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 77
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly

130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Lys Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 78
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 78
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgacaggct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 79
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 79
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Arg Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 80
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 80
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagaa ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 81

<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 81
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Lys Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 82
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 82
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagga ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 83
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 83
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

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Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20                  25                  30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Glu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 84
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 84
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccaggg cgacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 85
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 85
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Gly Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 86
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 86
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 87
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 87
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val

115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 88
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 88
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 89
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 89
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Glu Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 90
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 90
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 91
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 91
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asn Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

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Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 92
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 92
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 93
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 93
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Val Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 94
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 94
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 95
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 95
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

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Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Gly Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 96
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 96
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 97
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 97
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu

```
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Ser Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 98
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 98
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct       60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc      120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt      180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg      240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg      300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc      360
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acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacaagata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 99
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 99
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

```
Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Lys Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 100
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 100
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctataatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 101
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 101
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Tyr
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 102
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 102
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctggaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 103
<211> 288
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 103
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

```
Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Trp
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 104
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 104
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttcagt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 105
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 105
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Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1               5                   10                  15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20                  25                  30
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```
Ile Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg
        35                  40                  45

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 106
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 106
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttccagt ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 107
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 107
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp

85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 108
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 108
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatc tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 109
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 109
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

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Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Leu Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 110
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 110
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt ccctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 111
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 111
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

```
Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Thr Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 112
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 112
gtggacgggt ttggagatgt gggagccctg gaagccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttccagt ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 113
<211> 288

<212> PRT
<213> Artificial Sequence

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

<400> 113
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ala Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 114
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 114
gtcgacggat ttggtgatgt cggtgctctt gaggctttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 115
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 115
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ala Leu Arg Gly Asn
1 5 10 15

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Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20                  25                  30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 116

<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 116
gtcgacggat ttggtgatgt cggtgctctt gaggacttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 117
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 117
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Asp Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met

65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 118
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 118
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctccg cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 119
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 119
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ala
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

```
Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 120
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 120
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct       60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc      120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt      180

cgcttctccg acctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg      240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg      300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc      360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc      420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa      480
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gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 121
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 121
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Asp
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

```
Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 122
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 122
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caagcccctt ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttccagt ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 123
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 123
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Ser Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 124
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 124
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgcttcagtt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 125
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 125

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Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1               5                  10                  15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20                  25                  30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
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275 280 285

<210> 126
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 126
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccgtgcccat ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 127
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 127
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser

50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Val Pro Ile Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 128
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 128
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgccgata tccgcacaga cactccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 129
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 129
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

```
Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Ile Ser Ala
            260                 265                 270

Gln Thr Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 130
<211> 330
<212> DNA
<213> Artificial Sequence

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

<400> 130
atgctggagg gagtgcaggt ggagactatt agccccggag atggcagaac attccccaaa       60

agaggacaga cttgcgtcgt gcattatact ggaatgctgg aagacggcaa gaaggtggac      120

agcagccggg accgaaacaa gcccttcaag ttcatgctgg ggaagcagga agtgatccgg      180

ggctgggagg aaggagtcgc acagatgtca gtgggacaga gggccaaact gactattagc      240

ccagactacg cttatggagc aaccggccac cccgggatca ttccccctca tgctacactg      300

gtcttcgatg tggagctgct gaagctggaa                                       330
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<210> 131
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 131
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 132
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 132
agcggaggag gatccgga 18

<210> 133
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 133
Ser Gly Gly Gly Ser Gly
1 5

<210> 134
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 134
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttcaact ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 135
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 135
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 136
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 136
ccgcgg 6

<210> 137
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 137
Pro Arg
1

<210> 138
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 138
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 139
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 139
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 140
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 140
ccatgg 6

<210> 141
<211> 2
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 141
Pro Trp
1

<210> 142
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 142
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 143
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 143
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 144
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 144
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 145

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

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

<400> 145
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 146
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 146
ggcggaggaa gcggaggtgg gggc 24

<210> 147
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 147
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 148
<211> 360

<212> DNA
<213> Artificial Sequence

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

<400> 148
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 149
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 149
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 150
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 150
ggatcc 6

<210> 151
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 151
Gly Ser
1

<210> 152
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 152
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 153
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 153
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 154
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 154
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 155
<211> 42
<212> PRT
<213> Artificial Sequence

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

<400> 155
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 156
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 156
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 157
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 157
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 158
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 158
gtcgac 6

<210> 159
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 159
Val Asp
1

<210> 160
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 160
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 161
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 161
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys

35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 162
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 162
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 163
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 163
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 164
<211> 327
<212> DNA
<213> Artificial Sequence

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

<400> 164
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 165
<211> 109
<212> PRT
<213> Artificial Sequence

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

<400> 165
Asp Ile Gln Leu Thr Gln Ser His Lys Phe Leu Ser Thr Ser Val Gly
1 5 10 15

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

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

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

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

Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln His Phe Arg Thr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Ala Leu
100 105

<210> 166
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 166
ggcggaggaa gcggaggtgg gggc 24

<210> 167
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 167
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 168
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 168
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct actttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 169
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 169
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
50 55 60

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

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
        115

<210> 170
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 170
ggatcc   6

<210> 171
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 171
Gly Ser
1

<210> 172
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 172
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt   48

<210> 173
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 173
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1   5   10   15

<210> 174
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 174
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 175
<211> 42
<212> PRT
<213> Artificial Sequence

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

<400> 175
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 176
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 176
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 177
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 177
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 178
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 178
ctcgag 6

<210> 179
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 179
Leu Glu
1

<210> 180
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 180
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 181
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 181
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 182
<211> 204
<212> DNA
<213> Artificial Sequence

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

<400> 182
ttctgggtac tggttgtagt cggtggcgta cttgcttgtt attctcttct tgttaccgta 60

gccttcatta tattctgggt ccgatcaaag cgctcaagac tcctccattc cgattatatg 120

aacatgacac ctcgccgacc tggtcctaca cgcaaacatt atcaacccta cgcacccccc 180

cgagacttcg ctgcttatcg atcc   204

<210> 183
<211> 68
<212> PRT
<213> Artificial Sequence

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

<400> 183
Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu
1   5   10   15

Leu Val Thr Val Ala Phe Ile Ile Phe Trp Val Arg Ser Lys Arg Ser
            20   25   30

Arg Leu Leu His Ser Asp Tyr Met Asn Met Thr Pro Arg Arg Pro Gly

```
        35                  40                  45

Pro Thr Arg Lys His Tyr Gln Pro Tyr Ala Pro Pro Arg Asp Phe Ala
    50                  55                  60

Ala Tyr Arg Ser
65
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<210> 184
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 184
gttgccgcca tcctgggcct gggcctggtg ctggggctgc tgggcccccc ggccatcctg 60

ctggccctgt acctgctccg ggaccagagg ctgccccccg atgcccacaa gccccctggg 120

ggaggcagtt tccggacccc catccaagag gagcaggccg acgcccactc caccctggcc 180

aagatc 186

<210> 185
<211> 63
<212> PRT
<213> Artificial Sequence

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

<400> 185
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Val Ala Ala Ile Leu Gly Leu Gly Leu Val Leu Gly Leu Leu Gly Pro
1               5                   10                  15

Leu Ala Ile Leu Leu Ala Leu Tyr Leu Leu Arg Arg Asp Gln Arg Leu
            20                  25                  30

Pro Pro Asp Ala His Lys Pro Pro Gly Gly Gly Ser Phe Arg Thr Pro
        35                  40                  45

Ile Gln Glu Glu Gln Ala Asp Ala His Ser Thr Leu Ala Lys Ile
    50                  55                  60
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<210> 186
<211> 135
<212> DNA
<213> Artificial Sequence

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

<400> 186

agtgtagtta aaagaggaag aaaaaagttg ctgtatatat ttaaacaacc atttatgaga 60

ccagtgcaaa ccacccaaga agaagacgga tgttcatgca gattcccaga agaagaagaa 120

ggaggatgtg aattg 135

<210> 187
<211> 45
<212> PRT
<213> Artificial Sequence

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

<400> 187
Ser Val Val Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
1 5 10 15

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
20 25 30

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
35 40 45

<210> 188
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 188
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

```
Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Glu Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 189
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 189
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc       60

agg                                                                     63


<210> 190
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"
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<400> 190
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys Ser Arg
            20

<210> 191
<211> 318
<212> DNA
<213> Artificial Sequence

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

<400> 191
gacatccagc tgacacaaag tcccagtagc ctgtcagcca gtgtcggcga tagggtgaca 60

attacatgct ccgcaagtag tagcgtcaga ttcatacact ggtaccagca gaagcctggg 120

aaggccccaa agaggcttat ctacgatacc agtaaactcg cctctggagt tcctagccgg 180

ttttctggat ctggcagcgg aactagctac accctcacaa tctccagtct gcaaccagag 240

gactttgcaa cctactactg ccagcaatgg agcagctccc ctttcacctt tgggcagggt 300

actaaggtgg agatcaag   318

<210> 192
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 192
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
            20   25   30

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

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50   55   60

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

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Ser Pro Phe Thr
                85   90   95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 193
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 193
ggcggaggaa gcggaggtgg gggc 24

<210> 194
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 194
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 195
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 195
gaggtgcagc ttgtagagag cgggggaggc ctcgtacagc cagggggctc tctgcgcctg 60

tcatgtgcag cttcaggatt caatataaag gactattaca ttcactgggt acggcaagct 120

cccggtaagg gcctggaatg gatcggttgg atcgaccctg aaaacggaga tacagaattt 180

gtgcccaagt tccagggaaa ggctaccatg tctgccgata cttctaagaa tacagcatac 240

cttcagatga attctctccg cgccgaggac acagccgtgt attattgtaa aacgggaggg 300

ttctggggtc agggtaccct tgtgactgtg tcttcc 336

<210> 196
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 196
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Lys Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

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

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 197
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 197
ggggatcccg cc 12

<210> 198
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 198
Gly Asp Pro Ala
1

<210> 199
<211> 36
<212> DNA
<213> Artificial Sequence

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

<400> 199
gagcccaaat ctcctgacaa aactcacaca tgccca 36

<210> 200
<211> 12
<212> PRT
<213> Artificial Sequence

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

<400> 200
Glu Pro Lys Ser Pro Asp Lys Thr His Thr Cys Pro
1 5 10

<210> 201
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 201
ccgtgcccag cacctgaact cctgggggga ccgtcagtct tcctcttccc cccaaaaccc 60

aaagacaccc tcatgatctc ccggacccct gaggtcacat gcgtggtggt ggacgtgagc 120

cacgaagacc ctgaggtcaa gttcaactgg tatgtggacg gcgtggaggt gcataatgca 180

aagacaaagc cgcgggagga gcagtacaac agcacgtacc gtgtggtcag cgtcctcacc 240

gtcctgcacc aggactggct gaatggcaag gagtacaagt gcaaggtctc caacaaagcc 300

ctcccagccc ccatcgagaa aaccatctcc aaagccaaa 339

<210> 202
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 202
Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
1 5 10 15

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

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
35 40 45

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
50 55 60

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
65 70 75 80

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
85 90 95

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
100 105 110

Lys

<210> 203
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 203
gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggatga gctgaccaag 60

aaccaggtca gcctgacctg cctggtcaaa ggcttctatc ccagcgacat cgccgtggag 120

tgggagagca atgggcaacc ggagaacaac tacaagacca cgcctcccgt gctggactcc 180

gacggctcct tcttcctcta cagcaagctc accgtggaca agagcaggtg gcagcagggg 240

aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 300

ctctccctgt ctccgggtaa a 321

<210> 204
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 204
Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
1 5 10 15

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
20 25 30

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
35 40 45

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
50 55 60

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65 70 75 80

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
85 90 95

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
100 105

<210> 205
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 205
aaagatccca aa 12

<210> 206
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 206
Lys Asp Pro Lys
1

<210> 207
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 207
ttttgggtgc tggtggtggt tggtggagtc ctggcttgct atagcttgct agtaacagtg 60

gcctttatta tt 72

<210> 208
<211> 24
<212> PRT
<213> Artificial Sequence

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

<400> 208
Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu
1 5 10 15

Leu Val Thr Val Ala Phe Ile Ile

20

<210> 209
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 209
gccggc 6

<210> 210
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 210
Ala Gly
1

<210> 211
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 211
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgc 336

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

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

<400> 212
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

```
Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20                  25                  30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35                  40                  45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50                  55                  60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65                  70                  75                  80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85                  90                  95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100                 105                 110
```

<210> 213
<211> 513
<212> DNA
<213> Artificial Sequence

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

<400> 213
gccgctgggg gcccaggcgc cggatcagct gctcccgtat cttctacttc ttctttgccg 60

ctggctgctc tgaacatgcg cgtgagaaga cgcctctccc tgttccttaa cgttcgcaca 120

caagtcgctg ccgattggac cgcccttgcc gaagaaatgg actttgaata cctggaaatt 180

agacaacttg aaacacaggc cgaccccact ggcagactcc tggacgcatg gcagggaaga 240

cctggtgcaa gcgttggacg gctcctggat ctcctgacaa aactgggacg cgacgacgta 300

ctgcttgaac tcggacctag cattgaagaa gactgccaaa aatatatcct gaaacaacaa 360

caagaagaag ccgaaaaacc tctccaagtc gcagcagtgg actcatcagt accccgaaca 420

gctgagcttg ctgggattac tacactcgac gacccactcg gacatatgcc tgaaagattc 480

gacgctttca tttgctattg cccctctgac ata 513

<210> 214
<211> 171
<212> PRT
<213> Artificial Sequence

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

<400> 214
```
Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser Thr
1               5                   10                  15
```

Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg Leu
            20   25   30

Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr Ala
        35   40   45

Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu Glu
    50   55   60

Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly Arg
65   70   75   80

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

Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp Cys
            100   105   110

Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro Leu
        115   120   125

Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu Ala
    130   135   140

Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg Phe
145   150   155   160

Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
                165   170

<210> 215
<211> 189
<212> DNA
<213> Artificial Sequence

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

<400> 215
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaatag   189

<210> 216
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 216
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 217
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 217
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 218
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 218
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 219
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 219
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 220
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 220
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 221
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 221
ggcggaggaa gcggaggtgg gggc 24

<210> 222
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 222
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 223
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 223
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 224
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 224
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln

100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 225
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 225
ggggatcccg cc 12

<210> 226
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 226
Gly Asp Pro Ala
1

<210> 227
<211> 36
<212> DNA
<213> Artificial Sequence

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

<400> 227
gagcccaaat ctcctgacaa aactcacaca tgccca 36

<210> 228
<211> 12
<212> PRT
<213> Artificial Sequence

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

<400> 228
Glu Pro Lys Ser Pro Asp Lys Thr His Thr Cys Pro
1 5 10

<210> 229
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 229
ccgtgcccag cacctgaact cctgggggga ccgtcagtct tcctcttccc cccaaaaccc 60

aaagacaccc tcatgatctc ccggacccct gaggtcacat gcgtggtggt ggacgtgagc 120

cacgaagacc ctgaggtcaa gttcaactgg tatgtggacg gcgtggaggt gcataatgca 180

aagacaaagc cgcgggagga gcagtacaac agcacgtacc gtgtggtcag cgtcctcacc 240

gtcctgcacc aggactggct gaatggcaag gagtacaagt gcaaggtctc caacaaagcc 300

ctcccagccc ccatcgagaa aaccatctcc aaagccaaa 339

<210> 230
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 230
Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
1 5 10 15

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

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
35 40 45

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
50 55 60

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
65 70 75 80

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
85 90 95

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
100 105 110

Lys

<210> 231
<211> 321
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 231
gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggatga gctgaccaag 60

aaccaggtca gcctgacctg cctggtcaaa ggcttctatc ccagcgacat cgccgtggag 120

tgggagagca atgggcaacc ggagaacaac tacaagacca cgcctcccgt gctggactcc 180

gacggctcct tcttcctcta cagcaagctc accgtggaca agagcaggtg gcagcagggg 240

aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 300

ctctccctgt ctccgggtaa a 321

<210> 232
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 232
Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
1 5 10 15

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
20 25 30

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
35 40 45

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
50 55 60

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65 70 75 80

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
85 90 95

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
100 105

<210> 233
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 233
aaagatccca aa 12

<210> 234
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 234
Lys Asp Pro Lys
1

<210> 235
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 235
ttttgggtgc tggtggtggt tggtggagtc ctggcttgct atagcttgct agtaacagtg 60

gcctttatta tt 72

<210> 236
<211> 24
<212> PRT
<213> Artificial Sequence

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

<400> 236
Phe Trp Val Leu Val Val Val Gly Gly Val Leu Ala Cys Tyr Ser Leu
1 5 10 15

Leu Val Thr Val Ala Phe Ile Ile
20

<210> 237
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 237
ctcgag 6

<210> 238
<211> 2
<212> PRT

<213> Artificial Sequence

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

<400> 238
Leu Glu
1

<210> 239
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 239
atggccgctg ggggcccagg cgccggatca gctgctcccg tatcttctac ttcttctttg 60

ccgctggctg ctctgaacat gcgcgtgaga agacgcctct ccctgttcct taacgttcgc 120

acacaagtcg ctgccgattg gaccgccctt gccgaagaaa tggactttga atacctggaa 180

attagacaac ttgaaacaca ggccgacccc actggcagac tcctggacgc atggcaggga 240

agacctggtg caagcgttgg acggctcctg gatctcctga caaaactggg acgcgacgac 300

gtactgcttg aactcggacc tagcattgaa gaagactgcc aaaaatatat cctgaaacaa 360

caacaagaag aagccgaaaa acctctccaa gtcgcagcag tggactcatc agtaccccga 420

acagctgagc ttgctgggat tactacactc gacgacccac tcggacatat gcctgaaaga 480

ttcgacgctt tcatttgcta ttgcccctct gacata 516

<210> 240
<211> 172
<212> PRT
<213> Artificial Sequence

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

<400> 240
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 241
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 241
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaa 186

<210> 242
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 242
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 243
<211> 15
<212> DNA
<213> Artificial Sequence

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

<400> 243
gcggccgcag tcgag 15

<210> 244
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 244
Ala Ala Ala Val Glu
1 5

<210> 245
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 245
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgctaa 339

<210> 246
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 246
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 247
<211> 42
<212> DNA
<213> Artificial Sequence

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

<400> 247
atggggagta gcaagagcaa gcctaaggac cccagccagc gc   42

<210> 248
<211> 14
<212> PRT
<213> Artificial Sequence

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

<400> 248
Met Gly Ser Ser Lys Ser Lys Pro Lys Asp Pro Ser Gln Arg
1   5   10

<210> 249
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 249

ctcgac 6

<210> 250
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 250
Leu Asp
1

<210> 251
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 251
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 252
<211> 172
<212> PRT
<213> Artificial Sequence

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

<400> 252
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
    50   55   60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65   70   75   80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
            100   105   110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
        115   120   125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
    130   135   140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145   150   155   160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
                165   170

<210> 253
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 253
gtcgag   6

<210> 254
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 254
Val Glu
1

<210> 255
<211> 186
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 255
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 256
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 256
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 257
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 257
ccgcgg 6

<210> 258
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 258
Pro Arg
1

<210> 259
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 259
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 260
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 260
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 261
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 261
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 262
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 262
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 263
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 263
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 264
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 264
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 265
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 265
ggcggaggaa gcggaggtgg gggc 24

<210> 266
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 266
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 267
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 267
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 268
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 268
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 269
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 269
ggatcc 6

<210> 270
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 270
Gly Ser
1

<210> 271
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 271
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 272
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 272
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1   5   10   15

<210> 273
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 273
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 274
<211> 42
<212> PRT
<213> Artificial Sequence

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

<400> 274
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1   5   10   15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
        35   40

<210> 275
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 275
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 276
<211> 37

<212> PRT
<213> Artificial Sequence

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

<400> 276
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 277
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 277
gtcgac 6

<210> 278
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 278
Val Asp
1

<210> 279
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 279
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 280
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 280
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 281
<211> 888
<212> DNA
<213> Artificial Sequence

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

<400> 281
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gagctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatccagt ttgtgcagga gatgatccgg 540

caactggaac agacaaacta tcgactgaag ttgtgtgtgt ctgaccgcga tgtcctgcct 600

ggcacctgtg tctggtctat tgctagtgag ctcatcgaaa agaggtgccg ccggatggtg 660

gtggttgtct ctgatgatta cctgcagagc aaggaatgtg acttccagac caaatttgca 720

ctcagcctct ctccaggtgc ccatcagaag cgactgatcc ccatcaagta caaggcaatg 780

aagaaagagt tccccagcat cctgaggttc atcactgtct gcgactacac caacccctgc 840

accaaatctt ggttctggac tcgccttgcc aaggccttgt ccctgccc 888

<210> 282
<211> 296
<212> PRT
<213> Artificial Sequence

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

<400> 282
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile Gln Phe Val Gln

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                165                 170                 175

Glu Met Ile Arg Gln Leu Glu Gln Thr Asn Tyr Arg Leu Lys Leu Cys
            180                 185                 190

Val Ser Asp Arg Asp Val Leu Pro Gly Thr Cys Val Trp Ser Ile Ala
        195                 200                 205

Ser Glu Leu Ile Glu Lys Arg Cys Arg Arg Met Val Val Val Val Ser
    210                 215                 220

Asp Asp Tyr Leu Gln Ser Lys Glu Cys Asp Phe Gln Thr Lys Phe Ala
225                 230                 235                 240

Leu Ser Leu Ser Pro Gly Ala His Gln Lys Arg Leu Ile Pro Ile Lys
                245                 250                 255

Tyr Lys Ala Met Lys Lys Glu Phe Pro Ser Ile Leu Arg Phe Ile Thr
            260                 265                 270

Val Cys Asp Tyr Thr Asn Pro Cys Thr Lys Ser Trp Phe Trp Thr Arg
        275                 280                 285

Leu Ala Lys Ala Leu Ser Leu Pro
    290                 295


<210> 283
<211> 16
<212> PRT
<213> Homo sapiens

<400> 283
Met Gly Ser Asn Lys Ser Lys Pro Lys Asp Ala Ser Gln Arg Arg Arg
1               5                   10                  15


<210> 284
<211> 5
<212> PRT
<213> Artificial Sequence

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


<220>
<221> MOD_RES
<222> (4)..(4)
<223> Any amino acid

<400> 284
Met Gly Cys Xaa Cys
1               5


<210> 285
<211> 6
<212> PRT
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<213> Artificial Sequence

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

<400> 285
Gly Ser Gly Gly Gly Ser
1 5

<210> 286
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 286
Ser Gly Gly Gly Ser
1 5

<210> 287
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 287
Arg Ala Lys Phe Lys Gln Leu Leu
1 5

<210> 288
<211> 9
<212> PRT
<213> Artificial Sequence

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

<400> 288
Asn Leu Val Pro Met Val Ala Thr Val
1 5

<210> 289
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 289
Ser Gly Gly Gly Ser Gly

1 5

<210> 290
<211> 7
<212> PRT
<213> Homo sapiens

<400> 290
Thr Asp Pro Thr Arg Arg Phe
1 5

<210> 291
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 291
tccgccctga gcaaagac 18

<210> 292
<211> 20
<212> DNA
<213> Artificial Sequence

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

<400> 292
acgaactcca gcaggaccat 20

<210> 293
<211> 15
<212> DNA
<213> Artificial Sequence

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

<400> 293
acgagaagcg cgatc 15

<210> 294
<211> 19
<212> DNA
<213> Artificial Sequence

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

<400> 294
ctggaatctg gcggtggat 19

<210> 295
<211> 23
<212> DNA
<213> Artificial Sequence

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

<400> 295
caaactctca agagcaccga cat 23

<210> 296
<211> 15
<212> DNA
<213> Artificial Sequence

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

<400> 296
cggagtcgac ggatt 15

<210> 297
<211> 5
<212> PRT
<213> Homo sapiens

<400> 297
Gly Cys Phe Asn Phe
1 5

<210> 298
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 298
Cys Ile Val Ser Met
1 5

<210> 299
<211> 4
<212> PRT
<213> Homo sapiens

<400> 299
Ala Thr Pro Phe
1

<210> 300
<211> 288
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 300
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 301
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 301
Asp Ala Ile Ser Ser
1 5

<210> 302
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 302
Ala Ala Ala Ala Ala
1 5

<210> 303
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 303
Ile Ser Ala Gln Thr
1 5

<210> 304
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 304
Ala Val Pro Ile
1

<210> 305

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

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

<400> 305
Tyr Cys Ser Thr Leu
1 5

<210> 306
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 306
Cys Ile Val Ser Met
1 5

<210> 307
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 307
Gln Pro Thr Phe Thr
1 5

<210> 308
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 308
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 309
<211> 1002
<212> DNA
<213> Artificial Sequence

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

<400> 309

atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggtttt ga 1002

<210> 310
<211> 333
<212> PRT
<213> Artificial Sequence

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

<400> 310
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

```
Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
            100                 105                 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
        115                 120                 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325                 330
```

<210> 311
<211> 329
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 311
atgctcgagg gagtgcaggt ggagactatc tccccaggag acgggcgcac cttccccaag 60

cgcggccaga cctgcgtggt gcactacacc gggatgcttg aagatggaaa gaaagttgat 120

tcctcccggg acagaaacaa gccctttaag tttatgctag gcaagcagga ggtgatccga 180

ggctgggaag aaggggttgc ccagatgagt gtgggtcaga gagccaaact gactatatct 240

ccagattatg cctatggtgc cactgggcac ccaggcatca tcccaccaca tgccactctc 300

gtcttcgatg tggagcttct aaaactgga 329

<210> 312
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 312
tctggcggtg gatccgga 18

<210> 313
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 313
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 314
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 314
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 315
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 315
Ser Gly Gly Gly Ser Gly
1 5

<210> 316
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 316
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 317
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 317
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 318
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 318
agcggaggag gatccgga 18

<210> 319
<211> 60
<212> DNA
<213> Artificial Sequence

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

<400> 319
ccgcgggaag gccgagggag cctgctgaca tgtggcgatg tggaggaaaa cccaggacca 60

<210> 320
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 320
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 321
<211> 330
<212> DNA
<213> Artificial Sequence

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

<400> 321
atgctggagg gagtgcaggt ggagactatt agccccggag atggcagaac attccccaaa 60

agaggacaga cttgcgtcgt gcattatact ggaatgctgg aagacggcaa gaaggtggac 120

agcagccggg accgaaacaa gcccttcaag ttcatgctgg ggaagcagga agtgatccgg 180

ggctgggagg aaggagtcgc acagatgtca gtgggacaga gggccaaact gactattagc 240

ccagactacg cttatggagc aaccggccac cccgggatca ttccccctca tgctacactg 300

gtcttcgatg tggagctgct gaagctggaa 330

<210> 322
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 322
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 323
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 323
agcggaggag gatccgga 18

<210> 324
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 324

Ser Gly Gly Gly Ser Gly
1   5

<210> 325
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 325
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttcaact ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc   864

<210> 326
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 326
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1   5   10   15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20   25   30

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

```
Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 327
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 327
ccgcgg 6

<210> 328
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 328
Pro Arg
1

<210> 329
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 329
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 330
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 330
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 331
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 331
ccatgg 6

<210> 332
<211> 2

<212> PRT
<213> Artificial Sequence

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

<400> 332
Pro Trp
1

<210> 333
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 333
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 334
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 334
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 335
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 335
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 336
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 336
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 337
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 337
ggcggaggaa gcggaggtgg gggc 24

<210> 338
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 338
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 339
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 339
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 340
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 340
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 341
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 341
ggatcc 6

<210> 342
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 342
Gly Ser
1

<210> 343
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 343
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 344
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 344
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 345
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 345

cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 346
<211> 42
<212> PRT
<213> Artificial Sequence

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

<400> 346
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 347
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 347
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 348
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 348
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 349
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 349
gtcgac 6

<210> 350
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 350
Val Asp
1

<210> 351
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 351
atggccgctg ggggcccagg cgccggatca gctgctcccg tatcttctac ttcttctttg 60

ccgctggctg ctctgaacat gcgcgtgaga agacgcctct ccctgttcct taacgttcgc 120

acacaagtcg ctgccgattg gaccgccctt gccgaagaaa tggactttga atacctggaa 180

attagacaac ttgaaacaca ggccgacccc actggcagac tcctggacgc atggcaggga 240

agacctggtg caagcgttgg acggctcctg gatctcctga caaaactggg acgcgacgac 300

gtactgcttg aactcggacc tagcattgaa gaagactgcc aaaaatatat cctgaaacaa 360

caacaagaag aagccgaaaa acctctccaa gtcgcagcag tggactcatc agtaccccga 420

acagctgagc ttgctgggat tactacactc gacgacccac tcggacatat gcctgaaaga 480

ttcgacgctt tcatttgcta ttgcccctct gacata 516

<210> 352
<211> 172
<212> PRT
<213> Artificial Sequence

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

<400> 352
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 353
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 353
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaa 186

<210> 354
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 354
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 355
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 355
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 356
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 356
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 357
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 357
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 358
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 358
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 359
<211> 327
<212> DNA
<213> Artificial Sequence

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

<400> 359
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 360
<211> 109
<212> PRT
<213> Artificial Sequence

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

<400> 360
Asp Ile Gln Leu Thr Gln Ser His Lys Phe Leu Ser Thr Ser Val Gly
1 5 10 15

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

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

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

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

Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln His Phe Arg Thr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Ala Leu
100 105

<210> 361
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 361
ggcggaggaa gcggaggtgg gggc 24

<210> 362
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 362
Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 363
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 363
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata   60

tcttgtaaag cctccggtta ccctttttacg aactatggaa tgaactgggt caaacaagcc   120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc   180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac   240

cttcagatta acaatcttaa aagcgaggat atggcaacct acttttgcgc aagatgggaa   300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc   357

<210> 364
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 364
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1   5   10   15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
        35   40   45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
    50   55   60

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

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
                85   90   95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
            100   105   110

Thr Thr Val Thr Val Ser Ser
        115

<210> 365
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 365
ggatcc   6

<210> 366
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 366
Gly Ser
1

<210> 367
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 367
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt   48

<210> 368
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 368
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1   5   10   15

<210> 369
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 369
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 370
<211> 42
<212> PRT
<213> Artificial Sequence

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

<400> 370
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 371
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 371
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 372
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 372
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 373
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 373
ctcgag 6

<210> 374
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 374
Leu Glu
1

<210> 375
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 375
atggccgctg ggggcccagg cgccggatca gctgctcccg tatcttctac ttcttctttg 60

ccgctggctg ctctgaacat gcgcgtgaga agacgcctct ccctgttcct taacgttcgc 120

acacaagtcg ctgccgattg gaccgccctt gccgaagaaa tggactttga atacctggaa 180

attagacaac ttgaaacaca ggccgacccc actggcagac tcctggacgc atggcaggga 240

agacctggtg caagcgttgg acggctcctg gatctcctga caaaactggg acgcgacgac 300

gtactgcttg aactcggacc tagcattgaa gaagactgcc aaaaatatat cctgaaacaa 360

caacaagaag aagccgaaaa acctctccaa gtcgcagcag tggactcatc agtaccccga 420

acagctgagc ttgctgggat tactacactc gacgacccac tcggacatat gcctgaaaga 480

ttcgacgctt tcatttgcta ttgcccctct gacata 516

<210> 376
<211> 172
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 376
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 377
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 377
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaa 186

<210> 378
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 378
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 379
<211> 15
<212> DNA
<213> Artificial Sequence

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

<400> 379
gcggccgcag tcgag 15

<210> 380
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 380
Ala Ala Ala Val Glu
1 5

<210> 381
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 381
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca ggccctgccc cctcgc 336

<210> 382
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 382
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 383
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 383
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

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Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
        35                  40                  45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
    50                  55                  60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65                  70                  75                  80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
                85                  90                  95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
            100                 105                 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
        275                 280
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<210> 384
<211> 846
<212> DNA
<213> Artificial Sequence

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

<400> 384
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggccgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatca 846

<210> 385
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 385
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys

85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
275 280

<210> 386
<211> 846
<212> DNA
<213> Artificial Sequence

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

<400> 386
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt cagttcctcc ggaaaaaact tttctttaaa 840

acatca 846

<210> 387
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 387
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

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Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
        275                 280
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<210> 388
<211> 846
<212> DNA
<213> Artificial Sequence

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

<400> 388
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggccgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt cagttcctcc ggaaaaaact tttctttaaa 840

acatca 846

<210> 389
<211> 282
<212> PRT
<213> Artificial Sequence

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

<400> 389
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

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

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Ala Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
275 280

<210> 390
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 390
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccctt ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttccagt ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 391
<211> 288

<212> PRT
<213> Artificial Sequence

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

<400> 391
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Gln Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 392
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 392
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggccgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 393
<211> 324
<212> DNA
<213> Artificial Sequence

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

<400> 393
atgggagtgc aggtggagac tattagcccc ggagatggca gaacattccc caaaagagga 60

cagacttgcg tcgtgcatta tactggaatg ctggaagacg gcaagaaggt ggacagcagc 120

cgggaccgaa acaagccctt caagttcatg ctggggaagc aggaagtgat ccggggctgg 180

gaggaaggag tcgcacagat gtcagtggga cagagggcca aactgactat tagcccagac 240

tacgcttatg gagcaaccgg ccaccccggg atcattcccc ctcatgctac actggtcttc 300

gatgtggagc tgctgaagct ggaa 324

<210> 394
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 394
Met Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe
1 5 10 15

Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu
20 25 30

Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys
35 40 45

Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val
50 55 60

Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp
65 70 75 80

Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala
85 90 95

Thr Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 395
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 395
agcggaggag gatccgga 18

<210> 396
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 396
Ser Gly Gly Gly Ser Gly
1 5

<210> 397
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 397
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttcaact ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 398
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 398
ccgcgg 6

<210> 399
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 399
Pro Arg
1

<210> 400
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 400
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 401
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 401
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 402
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 402
ccatgg 6

<210> 403
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 403
Pro Trp

1

<210> 404
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 404
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 405
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 405
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 406
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 406
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 407
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 407
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 408
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 408
ggcggaggaa gcggaggtgg gggc 24

<210> 409
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 409
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 410
<211> 360
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 410
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 411
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 411
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 412
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 412
ggatcc 6

<210> 413
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 413
Gly Ser
1

<210> 414
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 414
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 415
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 415
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 416
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 416
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 417
<211> 42
<212> PRT

<213> Artificial Sequence

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

<400> 417
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 418
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 418
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 419
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 419
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 420
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 420
gtcgac 6

<210> 421
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 421
Val Asp
1

<210> 422
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 422
atggccgctg ggggcccagg cgccggatca gctgctcccg tatcttctac ttcttctttg 60

ccgctggctg ctctgaacat gcgcgtgaga agacgcctct ccctgttcct taacgttcgc 120

acacaagtcg ctgccgattg gaccgccctt gccgaagaaa tggactttga atacctggaa 180

attagacaac ttgaaacaca ggccgacccc actggcagac tcctggacgc atggcaggga 240

agacctggtg caagcgttgg acggctcctg gatctcctga caaaactggg acgcgacgac 300

gtactgcttg aactcggacc tagcattgaa gaagactgcc aaaaatatat cctgaaacaa 360

caacaagaag aagccgaaaa acctctccaa gtcgcagcag tggactcatc agtaccccga 420

acagctgagc ttgctgggat tactacactc gacgacccac tcggacatat gcctgaaaga 480

ttcgacgctt tcatttgcta ttgcccctct gacata 516

<210> 423
<211> 172
<212> PRT
<213> Artificial Sequence

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

<400> 423
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr

35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 424
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 424
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaa 186

<210> 425
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 425
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 426
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 426
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 427
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 427
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala

85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 428
<211> 3
<212> DNA
<213> Artificial Sequence

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

<400> 428
acg 3

<210> 429
<211> 1
<212> PRT
<213> Artificial Sequence

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

<400> 429
Thr
1

<210> 430
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 430
tggcacgaag gcctggaaga ggcctcaaga ctttactttg gtgaacgcaa cgttaaaggc 60

atgttcgagg tgctggaacc cttgcatgca atgatggagc gaggtcctca gacactcaaa 120

gagacatctt ttaaccaggc gtatggacgg gacctcatgg aggctcagga atggtgccgc 180

aagtacatga aaagtgggaa tgtgaaggat ctgctgcaag catgggatct gtattaccac 240

gtgtttagac ggatcagcaa a 261

<210> 431
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 431

Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1   5   10   15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
            20   25   30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
        35   40   45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
    50   55   60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65   70   75   80

Val Phe Arg Arg Ile Ser Lys
                85

<210> 432
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 432
cgtacg   6

<210> 433
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 433
Arg Thr
1

<210> 434
<211> 264
<212> DNA
<213> Artificial Sequence

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

<400> 434
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc   60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa   120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga   180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa gtaa 264

<210> 435
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 435
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 436
<211> 324
<212> DNA
<213> Artificial Sequence

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

<400> 436
atgggagtgc aggtggagac tattagcccc ggagatggca gaacattccc caaaagagga 60

cagacttgcg tcgtgcatta tactggaatg ctggaagacg gcaagaaggt ggacagcagc 120

cgggaccgaa acaagccctt caagttcatg ctggggaagc aggaagtgat ccggggctgg 180

gaggaaggag tcgcacagat gtcagtggga cagagggcca aactgactat tagcccagac 240

tacgcttatg gagcaaccgg ccaccccggg atcattcccc ctcatgctac actggtcttc 300

gatgtggagc tgctgaagct ggaa 324

<210> 437
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 437
Met Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe
1 5 10 15

Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu
20 25 30

Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys
35 40 45

Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val
50 55 60

Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp
65 70 75 80

Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala
85 90 95

Thr Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 438
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 438
agcggaggag gatccgga 18

<210> 439
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 439
Ser Gly Gly Gly Ser Gly
1 5

<210> 440
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 440
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttcaact ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 441
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 441
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp

85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 442
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 442
ccgcgg 6

<210> 443
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 443
Pro Arg
1

<210> 444
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 444
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 445
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 445
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 446
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 446
gcatgcgcca cc 12

<210> 447
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 447

Ala Cys Ala Thr
1

<210> 448
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 448
atggagtttg ggttgtcatg gttgtttctc gtcgctattc tcaaaggtgt acaatgctcc 60

cgc 63

<210> 449
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 449
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 450
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 450
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct actttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 451
<211> 119
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 451
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
50 55 60

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

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 452
<211> 45
<212> DNA
<213> Artificial Sequence

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

<400> 452
ggcggtggag gctccggtgg aggcggctct ggaggaggag gttca 45

<210> 453
<211> 15
<212> PRT
<213> Artificial Sequence

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

<400> 453
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 454
<211> 327
<212> DNA

<213> Artificial Sequence

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

<400> 454
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 455
<211> 109
<212> PRT
<213> Artificial Sequence

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

<400> 455
Asp Ile Gln Leu Thr Gln Ser His Lys Phe Leu Ser Thr Ser Val Gly
1 5 10 15

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

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

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

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

Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln His Phe Arg Thr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Ala Leu
100 105

<210> 456
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 456
atgcat 6

<210> 457
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 457
Met His
1

<210> 458
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 458
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 459
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 459
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 460
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 460
cccgccccaa gacccccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 461
<211> 42

<212> PRT
<213> Artificial Sequence

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

<400> 461
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 462
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 462
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 463
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 463
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 464
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 464
gtcgac 6

<210> 465
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 465
Val Asp
1

<210> 466
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 466
atggccgctg ggggcccagg cgccggatca gctgctcccg tatcttctac ttcttctttg 60

ccgctggctg ctctgaacat gcgcgtgaga agacgcctct ccctgttcct taacgttcgc 120

acacaagtcg ctgccgattg gaccgccctt gccgaagaaa tggactttga atacctggaa 180

attagacaac ttgaaacaca ggccgacccc actggcagac tcctggacgc atggcaggga 240

agacctggtg caagcgttgg acggctcctg gatctcctga caaaactggg acgcgacgac 300

gtactgcttg aactcggacc tagcattgaa gaagactgcc aaaaatatat cctgaaacaa 360

caacaagaag aagccgaaaa acctctccaa gtcgcagcag tggactcatc agtaccccga 420

acagctgagc ttgctgggat tactacactc gacgacccac tcggacatat gcctgaaaga 480

ttcgacgctt tcatttgcta ttgcccctct gacata 516

<210> 467
<211> 172
<212> PRT
<213> Artificial Sequence

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

<400> 467
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 468
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 468
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaa 186

<210> 469
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 469
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 470
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 470
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 471
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 471
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 472
<211> 3
<212> DNA
<213> Artificial Sequence

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

<400> 472
acg 3

<210> 473
<211> 1
<212> PRT
<213> Artificial Sequence

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

<400> 473
Thr
1

<210> 474
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 474
tggcacgaag gcctggaaga ggcctcaaga ctttactttg gtgaacgcaa cgttaaaggc 60

atgttcgagg tgctggaacc cttgcatgca atgatggagc gaggtcctca gacactcaaa 120

gagacatctt ttaaccaggc gtatggacgg gacctcatgg aggctcagga atggtgccgc 180

aagtacatga aaagtgggaa tgtgaaggat ctgctgcaag catgggatct gtattaccac 240

gtgtttagac ggatcagcaa a 261

<210> 475
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 475
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1   5   10   15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
            20   25   30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
        35   40   45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
    50   55   60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65   70   75   80

Val Phe Arg Arg Ile Ser Lys
                85

<210> 476
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 476
cgtacg   6

<210> 477
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 477
Arg Thr
1

<210> 478
<211> 264
<212> DNA
<213> Artificial Sequence

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

<400> 478
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc   60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa   120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa gtaa 264

<210> 479
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 479
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 480
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 480
gccacc 6

<210> 481
<211> 324
<212> DNA
<213> Artificial Sequence

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

<400> 481
atgggagtgc aggtggagac tattagcccc ggagatggca gaacattccc caaaagagga 60

cagacttgcg tcgtgcatta tactggaatg ctggaagacg gcaagaaggt ggacagcagc 120

cgggaccgaa acaagccctt caagttcatg ctggggaagc aggaagtgat ccggggctgg 180

gaggaaggag tcgcacagat gtcagtggga cagagggcca aactgactat tagcccagac 240

tacgcttatg gagcaaccgg ccaccccggg atcattcccc ctcatgctac actggtcttc 300

gatgtggagc tgctgaagct ggaa 324

<210> 482
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 482
Met Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe
1 5 10 15

Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu
20 25 30

Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys
35 40 45

Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val
50 55 60

Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp
65 70 75 80

Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala
85 90 95

Thr Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 483
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 483
agcggaggag gatccgga 18

<210> 484
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 484
Ser Gly Gly Gly Ser Gly
1 5

<210> 485
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 485
gtggacgggt ttggagatgt gggagccctg gaatccctgc ggggcaatgc cgatctggct 60

tacatcctgt ctatggagcc ttgcggccac tgtctgatca ttaacaatgt gaacttctgc 120

agagagagcg ggctgcggac cagaacagga tccaatattg actgtgaaaa gctgcggaga 180

aggttctcta gtctgcactt tatggtcgag gtgaaaggcg atctgaccgc taagaaaatg 240

gtgctggccc tgctggaact ggctcggcag gaccatgggg cactggattg ctgcgtggtc 300

gtgatcctga gtcacggctg ccaggcttca catctgcagt tccctggggc agtctatgga 360

actgacggct gtccagtcag cgtggagaag atcgtgaaca tcttcaacgg cacctcttgc 420

ccaagtctgg gcgggaagcc caaactgttc tttattcagg cctgtggagg cgagcagaaa 480

gatcacggct tcgaagtggc tagcacctcc cccgaggacg aatcacctgg aagcaaccct 540

gagccagatg caacccccct ccaggaaggc ctgaggacat ttgaccagct ggatgccatc 600

tcaagcctgc ccacaccttc tgacattttc gtctcttaca gtactttccc tggatttgtg 660

agctggcgcg atccaaagtc aggcagctgg tacgtggaga cactggacga tatctttgag 720

cagtgggccc attctgaaga cctgcagagt ctgctgctgc gagtggccaa tgctgtctct 780

gtgaagggga tctacaaaca gatgccagga tgcttcaact ttctgagaaa gaaactgttc 840

tttaagacct ccgcatctag ggcc 864

<210> 486
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 486
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

```
Ile Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg
        35                  40                  45

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285

<210> 487
<211> 6
<212> DNA
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<213> Artificial Sequence

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

<400> 487
ccgcgg 6

<210> 488
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 488
Pro Arg
1

<210> 489
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 489
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 490
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 490
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 491
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 491
gcatgcgcca cc 12

<210> 492
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 492
Ala Cys Ala Thr
1

<210> 493
<211> 63
<212> DNA
<213> Artificial Sequence

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

<400> 493
atggagtttg ggttgtcatg gttgtttctc gtcgctattc tcaaaggtgt acaatgctcc 60

cgc 63

<210> 494
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 494
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 495
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 495
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct acttttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 496
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 496
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
50 55 60

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

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 497
<211> 45
<212> DNA
<213> Artificial Sequence

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

<400> 497
ggcggtggag gctccggtgg aggcggctct ggaggaggag gttca 45

<210> 498
<211> 15
<212> PRT

<213> Artificial Sequence

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

<400> 498
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 499
<211> 327
<212> DNA
<213> Artificial Sequence

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

<400> 499
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 500
<211> 109
<212> PRT
<213> Artificial Sequence

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

<400> 500
Asp Ile Gln Leu Thr Gln Ser His Lys Phe Leu Ser Thr Ser Val Gly
1 5 10 15

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

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

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

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

Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln His Phe Arg Thr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Ala Leu
100 105

<210> 501
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 501
atgcat 6

<210> 502
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 502
Met His
1

<210> 503
<211> 48
<212> DNA
<213> Artificial Sequence

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

<400> 503
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 504
<211> 16
<212> PRT
<213> Artificial Sequence

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

<400> 504
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 505
<211> 126
<212> DNA
<213> Artificial Sequence

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

<400> 505
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 506
<211> 42
<212> PRT
<213> Artificial Sequence

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

<400> 506
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

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

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 507
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 507
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 508
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 508
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 509
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 509
gtcgac 6

<210> 510
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 510
Val Asp
1

<210> 511
<211> 516
<212> DNA
<213> Artificial Sequence

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

<400> 511
atggccgctg ggggcccagg cgccggatca gctgctcccg tatcttctac ttcttctttg 60

ccgctggctg ctctgaacat gcgcgtgaga agacgcctct ccctgttcct taacgttcgc 120

acacaagtcg ctgccgattg gaccgccctt gccgaagaaa tggactttga atacctggaa 180

attagacaac ttgaaacaca ggccgacccc actggcagac tcctggacgc atggcaggga 240

agacctggtg caagcgttgg acggctcctg gatctcctga caaaactggg acgcgacgac 300

gtactgcttg aactcggacc tagcattgaa gaagactgcc aaaaatatat cctgaaacaa 360

caacaagaag aagccgaaaa acctctccaa gtcgcagcag tggactcatc agtaccccga 420

acagctgagc ttgctgggat tactacactc gacgacccac tcggacatat gcctgaaaga 480

ttcgacgctt tcatttgcta ttgcccctct gacata 516

<210> 512
<211> 172
<212> PRT
<213> Artificial Sequence

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

<400> 512
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

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

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 513
<211> 186
<212> DNA
<213> Artificial Sequence

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

<400> 513
aagaaagttg caaagaaacc cacaaataaa gccccacacc ctaaacagga accccaagaa 60

atcaatttcc cagatgatct ccctggatct aatactgccg ccccggtcca agaaaccctg 120

catggttgcc agcctgtcac ccaagaggac ggaaaagaat cacggattag cgtacaagag 180

agacaa 186

<210> 514
<211> 62
<212> PRT
<213> Artificial Sequence

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

<400> 514
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

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

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

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 515
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 515
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgttga 339

<210> 516
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 516
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr

20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 517
<211> 9
<212> DNA
<213> Artificial Sequence

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

<400> 517
atgctcgag 9

<210> 518
<211> 3
<212> PRT
<213> Artificial Sequence

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

<400> 518
Met Leu Glu
1

<210> 519
<211> 320
<212> DNA
<213> Artificial Sequence

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

<400> 519
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga 320

<210> 520
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 520
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu
100 105

<210> 521
<211> 19
<212> DNA
<213> Artificial Sequence

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

<400> 521
atctggcggt ggatccgga 19

<210> 522
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 522
Ser Gly Gly Gly Ser Gly
1   5

<210> 523
<211> 921
<212> DNA
<213> Artificial Sequence

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

<400> 523
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agccgagggc aggggaagtc ttctaacatg cggggacgtg 900

gaggaaaatc ccgggccctg a   921

<210> 524
<211> 284
<212> PRT
<213> Artificial Sequence

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

<400> 524
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1   5   10   15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20   25   30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser
275 280

<210> 525
<211> 12
<212> DNA
<213> Artificial Sequence

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

<400> 525
gctagcagag cc 12

<210> 526
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 526
Ala Ser Arg Ala
1

<210> 527
<211> 57
<212> DNA
<213> Artificial Sequence

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

<400> 527
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccctga 57

<210> 528
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 528
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 529
<211> 9
<212> DNA
<213> Artificial Sequence

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

<400> 529
atgctcgag 9

<210> 530
<211> 3
<212> PRT
<213> Artificial Sequence

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

<400> 530
Met Leu Glu
1

<210> 531
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 531
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa g 261

<210> 532
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 532
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 533
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 533
tcaggcggtg gctcaggtgt cgag 24

<210> 534
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 534
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 535
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 535
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 536
<211> 287
<212> PRT
<213> Artificial Sequence

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

<400> 536
Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala
1 5 10 15

Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile
20 25 30

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

Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu
50 55 60

His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val
65 70 75 80

Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys
85 90 95

Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln
100 105 110

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

Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly
130 135 140

Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp
145 150 155 160

His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly
165 170 175

Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr
180 185 190

Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile
195 200 205

Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro
210 215 220

Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln
225 230 235 240

Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn
245 250 255

Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn
260 265 270

Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 537
<211> 57
<212> DNA
<213> Artificial Sequence

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

<400> 537
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccctga 57

<210> 538
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 538
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 539
<211> 270
<212> DNA
<213> Artificial Sequence

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

<400> 539

atgctcgagt ggcatgaagg cctggaagag gcatctcgtt tgtactttgg ggaaaggaac 60

gtgaaaggca tgtttgaggt gctggagccc ttgcacgcta tgatggaacg gggcccccag 120

actctgaagg aaacatcctt taatcaggcc tatggtcgag atttaatgga ggcccaagag 180

tggtgcagga agtacatgaa atcagggaat gtcaaggacc tcctccaagc ctgggacctc 240

tattatcatg tgttccgacg aatctcaaag 270

<210> 540
<211> 90
<212> PRT
<213> Artificial Sequence

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

<400> 540
Met Leu Glu Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe
1 5 10 15

Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His
20 25 30

Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn
35 40 45

Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys
50 55 60

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

Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 541
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 541
gtcgag 6

<210> 542
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 542
Val Asp
1

<210> 543
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 543
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa g 261

<210> 544
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 544
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 545
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 545
tcaggcggtg gctcaggtgt cgag 24

<210> 546
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 546
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 547
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 547
tggcatgaag gcctggaaga ggcatctcgt ttgtactttg gggaaaggaa cgtgaaaggc 60

atgtttgagg tgctggagcc cttgcacgct atgatggaac ggggccccca gactctgaag 120

gaaacatcct ttaatcaggc ctatggtcga gatttaatgg aggcccaaga gtggtgcagg 180

aagtacatga aatcagggaa tgtcaaggac ctcctccaag cctgggacct ctattatcat 240

gtgttccgac gaatctcaaa g 261

<210> 548
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 548
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys

50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 549
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 549
gtcgac 6

<210> 550
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 550
Val Asp
1

<210> 551
<211> 285
<212> DNA
<213> Artificial Sequence

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

<400> 551
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa gtcaggcggt ggctcaggtg tcgac 285

<210> 552
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 552
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 553
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 553
gtcgac 6

<210> 554
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 554
Val Glu
1

<210> 555
<211> 36
<212> DNA
<213> Artificial Sequence

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

<400> 555
tatccgtacg acgtaccaga ctacgcactc gactaa 36

<210> 556
<211> 11
<212> PRT
<213> Artificial Sequence

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

<400> 556
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Leu Asp
1 5 10

<210> 557
<211> 51
<212> DNA
<213> Artificial Sequence

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

<400> 557
atgggctgtg tgcaatgtaa ggataaagaa gcaacaaaac tgacggagga g 51

<210> 558
<211> 17
<212> PRT
<213> Artificial Sequence

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

<400> 558
Met Gly Cys Val Gln Cys Lys Asp Lys Glu Ala Thr Lys Leu Thr Glu
1 5 10 15

Glu

<210> 559
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 559
ctcgag 6

<210> 560
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 560
Leu Gly
1

<210> 561
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 561
tggcatgaag gcctggaaga ggcatctcgt ttgtactttg gggaaaggaa cgtgaaaggc 60

atgtttgagg tgctggagcc cttgcacgct atgatggaac ggggccccca gactctgaag 120

gaaacatcct ttaatcaggc ctatggtcga gatttaatgg aggcccaaga gtggtgcagg 180

aagtacatga aatcagggaa tgtcaaggac ctcctccaag cctgggacct ctattatcat 240

gtgttccgac gaatctcaaa g 261

<210> 562
<211> 90
<212> PRT
<213> Artificial Sequence

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

<400> 562
Met Leu Glu Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe
1 5 10 15

Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His
20 25 30

Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn
35 40 45

Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys
50 55 60

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

Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 563
<211> 6

<212> DNA
<213> Artificial Sequence

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

<400> 563
gtcgag 6

<210> 564
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 564
Val Asp
1

<210> 565
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 565
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa g 261

<210> 566
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 566
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr

35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 567
<211> 19
<212> DNA
<213> Artificial Sequence

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

<400> 567
tcaggcggtg gctcaggtg 19

<210> 568
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 568
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 569
<211> 36
<212> DNA
<213> Artificial Sequence

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

<400> 569
tatccgtacg acgtaccaga ctacgcactc gactaa 36

<210> 570
<211> 11
<212> PRT
<213> Artificial Sequence

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

<400> 570

Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Leu Asp
1 5 10

<210> 571
<211> 9
<212> DNA
<213> Artificial Sequence

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

<400> 571
atgctcgag 9

<210> 572
<211> 3
<212> PRT
<213> Artificial Sequence

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

<400> 572
Met Leu Glu
1

<210> 573
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 573
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tccccctaag attcccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 574
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 574
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro

1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 575
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 575
gtcgag 6

<210> 576
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 576
Val Asp
1

<210> 577
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 577
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaattcga ttcctctcgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccacctaag atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 578
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 578
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 579
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 579
tcaggcggtg gctcaggtgt cgag 24

<210> 580
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 580
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 581
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 581
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tccccctaag attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 582
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 582
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 583
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 583
gtcgac 6

<210> 584
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 584
Val Asp
1

<210> 585
<211> 321
<212> DNA
<213> Artificial Sequence

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

<400> 585
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaattcga ttcctctcgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccacctaag atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 586
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 586
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro

1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

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

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 587
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 587
tcaggcggtg gctcaggtgt cgag 24

<210> 588
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 588
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 589
<211> 36
<212> DNA
<213> Artificial Sequence

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

<400> 589
tatccgtacg acgtaccaga ctacgcactc gactaa 36

<210> 590
<211> 11
<212> PRT
<213> Artificial Sequence

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

<400> 590
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Leu Asp
1 5 10

<210> 591
<211> 330
<212> DNA
<213> Artificial Sequence

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

<400> 591
atgctcgagg gagtgcaggt ggagactatc tccccaggag acgggcgcac cttccccaag 60

cgcggccaga cctgcgtggt gcactacacc gggatgcttg aagatggaaa gaaagttgat 120

tcctcccggg acagaaacaa gccctttaag tttatgctag gcaagcagga ggtgatccga 180

ggctgggaag aaggggttgc ccagatgagt gtgggtcaga gagccaaact gactatatct 240

ccagattatg cctatggtgc cactgggcac ccaggcatca tcccaccaca tgccactctc 300

gtcttcgatg tggagcttct aaaactggaa 330

<210> 592
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 592
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 593
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 593
tctggcggtg gatccgga 18

<210> 594
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 594
Ser Gly Gly Gly Ser Gly
1 5

<210> 595
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 595
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 596
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 596
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 597
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 597
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 598
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 598
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 599
<211> 1002
<212> DNA
<213> Artificial Sequence

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

<400> 599
atgccacctc ctcgcctcct cttcttcctc ctcttcctca cccccatgga agtcaggccc 60

gaggaacctc tagtggtgaa ggtggaagag ggagataacg ctgtgctgca gtgcctcaag 120

gggacctcag atggccccac tcagcagctg acctggtctc gggagtcccc gcttaaaccc 180

ttcttaaaac tcagcctggg gctgccaggc ctgggaatcc acatgaggcc cctggccatc 240

tggcttttca tcttcaacgt ctctcaacag atgggggct tctacctgtg ccagccgggg 300

ccccctctg agaaggcctg gcagcctggc tggacagtca atgtggaggg cagcggggag 360

ctgttccggt ggaatgtttc ggacctaggt ggcctgggct gtggcctgaa gaacaggtcc 420

tcagagggcc ccagctcccc ttccgggaag ctcatgagcc ccaagctgta tgtgtgggcc 480

aaagaccgcc ctgagatctg ggagggagag cctccgtgtc tcccaccgag ggacagcctg 540

aaccagagcc tcagccagga cctcaccatg gcccctggct ccacactctg gctgtcctgt 600

ggggtacccc ctgactctgt gtccaggggc cccctctcct ggacccatgt gcaccccaag 660

gggcctaagt cattgctgag cctagagctg aaggacgatc gcccggccag agatatgtgg 720

gtaatggaga cgggtctgtt gttgccccgg gccacagctc aagacgctgg aaagtattat 780

tgtcaccgtg gcaacctgac catgtcattc cacctggaga tcactgctcg gccagtacta 840

tggcactggc tgctgaggac tggtggctgg aaggtctcag ctgtgacttt ggcttatctg 900

atcttctgcc tgtgttccct tgtgggcatt cttcatcttc aaagagccct ggtcctgagg 960

aggaaaagaa agcgaatgac tgaccccacc aggagattct aa 1002

<210> 600
<211> 333
<212> PRT
<213> Artificial Sequence

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

<400> 600
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

```
Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
            100                 105                 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
        115                 120                 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325                 330
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<210> 601
<211> 330
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 601
atgctcgagg gagtgcaggt ggagactatc tccccaggag acgggcgcac cttccccaag 60

cgcggccaga cctgcgtggt gcactacacc gggatgcttg aagatggaaa gaaagttgat 120

tcctcccggg acagaaacaa gccctttaag tttatgctag gcaagcagga ggtgatccga 180

ggctgggaag aaggggttgc ccagatgagt gtgggtcaga gagccaaact gactatatct 240

ccagattatg cctatggtgc cactgggcac ccaggcatca tcccaccaca tgccactctc 300

gtcttcgatg tggagcttct aaaactggaa 330

<210> 602
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 602
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 603
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 603
tctggcggtg gatccgga 18

<210> 604
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 604
Ser Gly Gly Gly Ser Gly
1   5

<210> 605
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 605
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 606
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 606

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Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1               5                  10                  15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
            20                  25                  30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
    50                  55                  60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
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275 280 285

<210> 607
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 607
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 608
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 608
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 609
<211> 999
<212> DNA
<213> Artificial Sequence

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

<400> 609
atgccacctc ctcgcctcct cttcttcctc ctcttcctca cccccatgga agtcaggccc 60

gaggaacctc tagtggtgaa ggtggaagag ggagataacg ctgtgctgca gtgcctcaag 120

gggacctcag atggccccac tcagcagctg acctggtctc gggagtcccc gcttaaaccc 180

ttcttaaaac tcagcctggg gctgccaggc ctgggaatcc acatgaggcc cctggccatc 240

tggcttttca tcttcaacgt ctctcaacag atgggggggct tctacctgtg ccagccgggg 300

ccccccctctg agaaggcctg gcagcctggc tggacagtca atgtggaggg cagcggggag 360

ctgttccggt ggaatgtttc ggacctaggt ggcctgggct gtggcctgaa gaacaggtcc 420

tcagagggcc ccagctcccc ttccgggaag ctcatgagcc ccaagctgta tgtgtgggcc 480

aaagaccgcc ctgagatctg ggagggagag cctccgtgtc tcccaccgag ggacagcctg 540

aaccagagcc tcagccagga cctcaccatg gcccctggct ccacactctg gctgtcctgt 600

ggggtacccc ctgactctgt gtccaggggc cccctctcct ggacccatgt gcaccccaag 660

gggcctaagt cattgctgag cctagagctg aaggacgatc gcccggccag agatatgtgg 720

gtaatggaga cgggtctgtt gttgccccgg gccacagctc aagacgctgg aaagtattat 780

tgtcaccgtg gcaacctgac catgtcattc cacctggaga tcactgctcg gccagtacta 840

tggcactggc tgctgaggac tggtggctgg aaggtctcag ctgtgacttt ggcttatctg 900

atcttctgcc tgtgttccct tgtgggcatt cttcatcttc aaagagccct ggtcctgagg 960

aggaaaagaa agcgaatgac tgaccccacc aggagattc 999

<210> 610
<211> 333
<212> PRT
<213> Artificial Sequence

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

<400> 610
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro

180 185 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
195 200 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225 230 235 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
245 250 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
260 265 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
275 280 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 611
<211> 9
<212> DNA
<213> Artificial Sequence

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

<400> 611
gggagtggg 9

<210> 612
<211> 3
<212> PRT
<213> Artificial Sequence

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

<400> 612
Gly Ser Gly
1

<210> 613

<211> 57
<212> DNA
<213> Artificial Sequence

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

<400> 613
gctacgaatt ttagcttgct gaagcaggcc ggtgatgtgg aagagaaccc cgggcct 57

<210> 614
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 614
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 615
<211> 264
<212> DNA
<213> Artificial Sequence

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

<400> 615
tggcacgaag gtttggaaga ggcctcccgc ctgtatttcg gtgagagaaa tgtcaaaggt 60

atgtttgaag tgcttgagcc cctgcacgcc atgatggaac gggggccgca gactctgaaa 120

gaaacctcat tcaaccaggc atacgggcga gacctgatgg aagcgcagga atggtgtagg 180

aagtacatga agtccggaaa tgtgaaggac ttgctccagg cttgggacct gtactatcac 240

gtatttcgga gaataagcaa gtaa 264

<210> 616
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 616
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
            20   25   30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
        35   40   45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
    50   55   60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65   70   75   80

Val Phe Arg Arg Ile Ser Lys
                85

<210> 617
<211> 330
<212> DNA
<213> Artificial Sequence

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

<400> 617
atgctcgagg gagtgcaggt ggagactatc tccccaggag acgggcgcac cttccccaag 60

cgcggccaga cctgcgtggt gcactacacc gggatgcttg aagatggaaa gaaagttgat 120

tcctcccggg acagaaacaa gccctttaag tttatgctag gcaagcagga ggtgatccga 180

ggctgggaag aaggggttgc ccagatgagt gtgggtcaga gagccaaact gactatatct 240

ccagattatg cctatggtgc cactgggcac ccaggcatca tcccaccaca tgccactctc 300

gtcttcgatg tggagcttct aaaactggaa   330

<210> 618
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 618
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1   5   10   15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
            20   25   30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
        35   40   45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
    50   55   60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 619
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 619
tctggcggtg gatccgga 18

<210> 620
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 620
Ser Gly Gly Gly Ser Gly
1 5

<210> 621
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 621
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 622
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 622
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 623
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 623
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 624
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 624
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 625
<211> 999
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 625
atgccacctc ctcgcctcct cttcttcctc ctcttcctca cccccatgga agtcaggccc 60

gaggaacctc tagtggtgaa ggtggaagag ggagataacg ctgtgctgca gtgcctcaag 120

gggacctcag atggccccac tcagcagctg acctggtctc gggagtcccc gcttaaaccc 180

ttcttaaaac tcagcctggg gctgccaggc ctgggaatcc acatgaggcc cctggccatc 240

tggcttttca tcttcaacgt ctctcaacag atgggggggct tctacctgtg ccagccgggg 300

ccccctctg agaaggcctg gcagcctggc tggacagtca atgtggaggg cagcggggag 360

ctgttccggt ggaatgtttc ggacctaggt ggcctgggct gtggcctgaa gaacaggtcc 420

tcagagggcc ccagctcccc ttccgggaag ctcatgagcc ccaagctgta tgtgtgggcc 480

aaagaccgcc ctgagatctg ggagggagag cctccgtgtc tcccaccgag ggacagcctg 540

aaccagagcc tcagccagga cctcaccatg gcccctggct ccacactctg gctgtcctgt 600

ggggtacccc ctgactctgt gtccaggggc cccctctcct ggacccatgt gcaccccaag 660

gggcctaagt cattgctgag cctagagctg aaggacgatc gcccggccag agatatgtgg 720

gtaatggaga cgggtctgtt gttgccccgg gccacagctc aagacgctgg aaagtattat 780

tgtcaccgtg gcaacctgac catgtcattc cacctggaga tcactgctcg gccagtacta 840

tggcactggc tgctgaggac tggtggctgg aaggtctcag ctgtgacttt ggcttatctg 900

atcttctgcc tgtgttccct tgtgggcatt cttcatcttc aaagagccct ggtcctgagg 960

aggaaaagaa agcgaatgac tgaccccacc aggagattc 999

<210> 626
<211> 333
<212> PRT
<213> Artificial Sequence

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

<400> 626
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

```
Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
                85                  90                  95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
            100                 105                 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
        115                 120                 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325                 330
```

<210> 627
<211> 9
<212> DNA

<213> Artificial Sequence

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

<400> 627
gggagtggg 9

<210> 628
<211> 3
<212> PRT
<213> Artificial Sequence

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

<400> 628
Gly Ser Gly
1

<210> 629
<211> 57
<212> DNA
<213> Artificial Sequence

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

<400> 629
gctacgaatt ttagcttgct gaagcaggcc ggtgatgtgg aagagaaccc cgggcct 57

<210> 630
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 630
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 631
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 631
tggcatgaag gtctggaaga agcttctcgc ctttattttg gcgaacggaa cgtaaaaggt 60

atgtttgaag tcctggagcc attgcacgcc atgatggagc gcgggcctca gaccctcaag 120

gaaaccagtt ttaatcaggc ctatgggcga gacctcatgg aggcacagga atggtgtcgg 180

aagtatatga agtccggcaa cgttaaggat ctcttgcagg cctgggactt gtattatcac 240

gtgttccggc gaatcagcaa g 261

<210> 632
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 632
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 633
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 633
cgtacg 6

<210> 634
<211> 2
<212> PRT
<213> Artificial Sequence

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

peptide"

<400> 634
Arg Thr
1

<210> 635
<211> 264
<212> DNA
<213> Artificial Sequence

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

<400> 635
tggcacgaag gtttggaaga ggcctcccgc ctgtatttcg gtgagagaaa tgtcaaaggt 60

atgtttgaag tgcttgagcc cctgcacgcc atgatggaac gggggccgca gactctgaaa 120

gaaacctcat tcaaccaggc atacgggcga gacctgatgg aagcgcagga atggtgtagg 180

aagtacatga agtccggaaa tgtgaaggac ttgctccagg cttgggacct gtactatcac 240

gtatttcgga gaataagcaa gtaa 264

<210> 636
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 636
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 637
<211> 330
<212> DNA
<213> Artificial Sequence

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

<400> 637
atgctcgagg gagtgcaggt ggagactatc tccccaggag acgggcgcac cttccccaag 60

cgcggccaga cctgcgtggt gcactacacc gggatgcttg aagatggaaa gaaagttgat 120

tcctcccggg acagaaacaa gccctttaag tttatgctag gcaagcagga ggtgatccga 180

ggctgggaag aaggggttgc ccagatgagt gtgggtcaga gagccaaact gactatatct 240

ccagattatg cctatggtgc cactgggcac ccaggcatca tcccaccaca tgccactctc 300

gtcttcgatg tggagcttct aaaactggaa 330

<210> 638
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 638
Met Leu Glu Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg
1 5 10 15

Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met
20 25 30

Leu Glu Asp Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro
35 40 45

Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu
50 55 60

Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser
65 70 75 80

Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro
85 90 95

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

<210> 639
<211> 18
<212> DNA
<213> Artificial Sequence

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

<400> 639

tctggcggtg gatccgga 18

<210> 640
<211> 6
<212> PRT
<213> Artificial Sequence

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

<400> 640
Ser Gly Gly Gly Ser Gly
1 5

<210> 641
<211> 864
<212> DNA
<213> Artificial Sequence

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

<400> 641
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 642
<211> 288
<212> PRT
<213> Artificial Sequence

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

<400> 642
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

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

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 643
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 643
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccc 54

<210> 644
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 644
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 645
<211> 999
<212> DNA
<213> Artificial Sequence

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

<400> 645
atgccacctc ctcgcctcct cttcttcctc ctcttcctca cccccatgga agtcaggccc 60

gaggaacctc tagtggtgaa ggtggaagag ggagataacg ctgtgctgca gtgcctcaag 120

gggacctcag atggccccac tcagcagctg acctggtctc gggagtcccc gcttaaaccc 180

ttcttaaaac tcagcctggg gctgccaggc ctgggaatcc acatgaggcc cctggccatc 240

tggcttttca tcttcaacgt ctctcaacag atgggggct tctacctgtg ccagccgggg 300

ccccctctg agaaggcctg gcagcctggc tggacagtca atgtggaggg cagcggggag 360

ctgttccggt ggaatgtttc ggacctaggt ggcctgggct gtggcctgaa gaacaggtcc 420

tcagagggcc ccagctcccc ttccgggaag ctcatgagcc ccaagctgta tgtgtgggcc 480

aaagaccgcc ctgagatctg ggagggagag cctccgtgtc tcccaccgag ggacagcctg 540

aaccagagcc tcagccagga cctcaccatg gcccctggct ccacactctg gctgtcctgt 600

ggggtacccc ctgactctgt gtccaggggc cccctctcct ggacccatgt gcaccccaag 660

gggcctaagt cattgctgag cctagagctg aaggacgatc gcccggccag agatatgtgg 720

gtaatggaga cgggtctgtt gttgccccgg gccacagctc aagacgctgg aaagtattat 780

tgtcaccgtg gcaacctgac catgtcattc cacctggaga tcactgctcg gccagtacta 840

tggcactggc tgctgaggac tggtggctgg aaggtctcag ctgtgacttt ggcttatctg 900

atcttctgcc tgtgttccct tgtgggcatt cttcatcttc aaagagccct ggtcctgagg 960

aggaaaagaa agcgaatgac tgaccccacc aggagattc 999

<210> 646
<211> 333
<212> PRT
<213> Artificial Sequence

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

<400> 646
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

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

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
180 185 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
195 200 205

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

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225 230 235 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
245 250 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
260 265 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
275 280 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 647
<211> 9
<212> DNA
<213> Artificial Sequence

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

<400> 647
gggagtggg 9

<210> 648
<211> 3
<212> PRT
<213> Artificial Sequence

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

<400> 648
Gly Ser Gly
1

<210> 649
<211> 57
<212> DNA
<213> Artificial Sequence

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

<400> 649
gctacgaatt ttagcttgct gaagcaggcc ggtgatgtgg aagagaaccc cgggcct 57

<210> 650
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 650
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 651
<211> 261
<212> DNA
<213> Artificial Sequence

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

<400> 651
tggcatgaag gtctggaaga agcttctcgc ctttattttg gcgaacggaa cgtaaaaggt 60

atgtttgaag tcctggagcc attgcacgcc atgatggagc gcgggcctca gaccctcaag 120

gaaaccagtt ttaatcaggc ctatgggcga gacctcatgg aggcacagga atggtgtcgg 180

aagtatatga agtccggcaa cgttaaggat ctcttgcagg cctgggactt gtattatcac 240

gtgttccggc gaatcagcaa g 261

<210> 652
<211> 87
<212> PRT
<213> Artificial Sequence

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

<400> 652
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
            20   25   30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
        35   40   45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
    50   55   60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65   70   75   80

Val Phe Arg Arg Ile Ser Lys
                85

<210> 653
<211> 6
<212> DNA
<213> Artificial Sequence

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

<400> 653
cgtacg   6

<210> 654
<211> 2
<212> PRT
<213> Artificial Sequence

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

<400> 654
Arg Thr
1

<210> 655
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 655
tggcacgaag gtctggacga ggctagtaga ctgtatttcg gcgagagaaa tgtaaaggga   60

atgttcgagg tactggagcc tctgcacgcc atgatggaac gcggccctca gacactcaag   120

gagactagtt ttaaccaggc ctatggcagg gatctgatgg aggctcagga atggtgccgg   180

aagtatatga aaagcggtaa cgtgaaggac ctgctgcagg cctgggatct gtattatcac   240

gtgtttagaa gaatctctaa a 261

<210> 656
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 656
Trp His Glu Gly Leu Asp Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 657
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 657
cgtacg 6

<210> 658
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 658
Arg Thr
1

<210> 659

<211> 264
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 659
tggcacgaag gtttggaaga ggcctcccgc ctgtatttcg gtgagagaaa tgtcaaaggt 60

atgtttgaag tgcttgagcc cctgcacgcc atgatggaac gggggccgca gactctgaaa 120

gaaacctcat tcaaccaggc atacgggcga gacctgatgg aagcgcagga atggtgtagg 180

aagtacatga agtccggaaa tgtgaaggac ttgctccagg cttgggacct gtactatcac 240

gtatttcgga gaataagcaa gtaa 264

<210> 660
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 660
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 661
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 661
tggcacgagg ggctggagga ggcaagtcga ctgtattttg gagaacgcaa cgtaaaggga 60

atgtttgagg tgctcgaacc actccatgct atgatggaaa gggggcctca gactcttaag 120

gaaacaagtt ttaatcaagc ctacggacga gacctcatgg aggcgcagga gtggtgcaga 180

aaatacatga aatcaggtaa tgttaaggac ctgctgcagg catgggacct gtactaccat 240

gtcttcaggc gcatctcaaa g 261

<210> 662
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 662
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 663
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 663
atgcattctg gtggaggatc aggcgttgaa 30

<210> 664
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 664

Met His Ser Gly Gly Gly Ser Gly Val Glu
1 5 10

<210> 665
<211> 513
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 665
gcagctggag gccctggcgc aggctctgca gcccctgtat ctagcacctc ttctcttcct 60

ctggctgcgc tgaacatgag agtgcggaga cggttgtctt tgttcttgaa tgtcagaaca 120

caggttgcag cggactggac cgctctggcc gaggaaatgg acttcgagta cctggagatc 180

aggcaactcg aaacgcaggc agatcctaca ggcagactgt tggatgcgtg gcagggacgg 240

cccggagcca gcgttggacg gctccttgat cttctcacca agctgggcag agatgacgtg 300

ctgctggaat tgggccccag tattgaggag gactgccaaa aatacatctt gaagcagcaa 360

caggaggagg cggagaagcc cctccaggtc gcagccgtcg attcatccgt gcctagaaca 420

gccgaacttg caggcatcac taccctggat gatcccctgg gccatatgcc agagaggttt 480

gatgcgttta tctgctattg cccaagcgat atc 513

<210> 666
<211> 171
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 666
Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser Thr
1 5 10 15

Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg Leu
20 25 30

Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr Ala
35 40 45

Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu Glu
50 55 60

Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly Arg
65 70 75 80

Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu Gly
85 90 95

Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp Cys
100 105 110

Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro Leu
115 120 125

Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu Ala
130 135 140

Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg Phe
145 150 155 160

Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 667
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 667
gttgag 6

<210> 668
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 668
Val Glu
1

<210> 669
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 669
aagaaggtgg ccaagaagcc aaccaataaa gctccacatc ctaaacagga gccacaagaa 60

atcaactttc cagatgatct ccctggctct aatactgcag cccccgtgca ggaaaccctg 120

cacggctgtc aacctgtgac acaggaagac gggaaggaaa gcaggatatc cgtgcaggaa 180

cggcaa 186

<210> 670
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 670
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 671
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 671
gtcgac 6

<210> 672
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 672
Val Asp
1

<210> 673
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 673
tacccatacg acgtgccaga ttatgct 27

<210> 674
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 674
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5

<210> 675
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 675
ccgcgg 6

<210> 676
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 676
Pro Arg
1

<210> 677
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 677
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 678
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 678
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1   5   10   15

Gly Pro

<210> 679
<211> 1002
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 679
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggtttt ga 1002

<210> 680
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 680
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1   5   10   15

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Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
            20                  25                  30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
        35                  40                  45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
    50                  55                  60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65                  70                  75                  80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
                85                  90                  95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
            100                 105                 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
        115                 120                 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
    210                 215                 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285
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Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 681
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 681
atgctcgag 9

<210> 682
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 682
Met Leu Glu
1

<210> 683
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 683
tggcacgagg ggctggagga ggcaagtcga ctgtattttg gagaacgcaa cgtaaaggga 60

atgtttgagg tgctcgaacc actccatgct atgatggaaa gggggcctca gactcttaag 120

gaaacaagtt ttaatcaagc ctacggacga gacctcatgg aggcgcagga gtggtgcaga 180

aaatacatga aatcaggtaa tgttaaggac ctgctgcagg catgggacct gtactaccat 240

gtcttcaggc gcatctcaaa g 261

<210> 684
<211> 87
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 684
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 685
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 685
atgcat 6

<210> 686
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 686
Met His
1

<210> 687
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 687

tggcacgaag gcctggaaga ggcctcaaga ctttactttg gtgaacgcaa cgttaaaggc 60

atgttcgagg tgctggaacc cttgcatgca atgatggagc gaggtcctca gacactcaaa 120

gagacatctt ttaaccaggc gtatggacgg gacctcatgg aggctcagga atggtgccgc 180

aagtacatga aaagtgggaa tgtgaaggat ctgctgcaag catgggatct gtattaccac 240

gtgtttagac ggatcagcaa a 261

<210> 688
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 688
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 689
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 689
atgcattctg gtggaggatc aggcgttgaa 30

<210> 690
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 690
Met His Ser Gly Gly Gly Ser Gly Val Glu
1 5 10

<210> 691
<211> 513
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 691
gcagctggag gccctggcgc aggctctgca gcccctgtat ctagcacctc ttctcttcct 60

ctggctgcgc tgaacatgag agtgcggaga cggttgtctt tgttcttgaa tgtcagaaca 120

caggttgcag cggactggac cgctctggcc gaggaaatgg acttcgagta cctggagatc 180

aggcaactcg aaacgcaggc agatcctaca ggcagactgt tggatgcgtg gcagggacgg 240

cccggagcca gcgttggacg gctccttgat cttctcacca agctgggcag agatgacgtg 300

ctgctggaat tgggccccag tattgaggag gactgccaaa aatacatctt gaagcagcaa 360

caggaggagg cggagaagcc cctccaggtc gcagccgtcg attcatccgt gcctagaaca 420

gccgaacttg caggcatcac taccctggat gatcccctgg gccatatgcc agagaggttt 480

gatgcgttta tctgctattg cccaagcgat atc 513

<210> 692
<211> 171
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 692
Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser Thr
1 5 10 15

Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg Leu
20 25 30

Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr Ala
35 40 45

Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu Glu
50 55 60

Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly Arg
65 70 75 80

Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu Gly
85 90 95

Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp Cys
100 105 110

Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro Leu
115 120 125

Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu Ala
130 135 140

Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg Phe
145 150 155 160

Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 693
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 693
gttgag 6

<210> 694
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 694
Val Glu
1

<210> 695
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 695
aagaaggtgg ccaagaagcc aaccaataaa gctccacatc ctaaacagga gccacaagaa 60

atcaactttc cagatgatct ccctggctct aatactgcag cccccgtgca ggaaaccctg 120

cacggctgtc aacctgtgac acaggaagac gggaaggaaa gcaggatatc cgtgcaggaa 180

cggcaa 186

<210> 696
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 696
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1   5   10   15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
            20   25   30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
        35   40   45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
    50   55   60

<210> 697
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 697
gtcgac   6

<210> 698
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 698
Val Asp
1

<210> 699
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 699

tacccatacg acgtgccaga ttatgct 27

<210> 700
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 700
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
1 5

<210> 701
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 701
ccgcgg 6

<210> 702
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 702
Pro Arg
1

<210> 703
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 703
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 704
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 704
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 705
<211> 1002
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 705
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggtttt ga 1002

<210> 706
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 706
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met

```
1               5                   10                  15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
            20                  25                  30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
        35                  40                  45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
    50                  55                  60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65                  70                  75                  80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
                85                  90                  95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
            100                 105                 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
        115                 120                 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
    210                 215                 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285
```

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 707
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 707
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 708
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 708
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 709
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 709
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 710
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 710
Asp Ile Gln Leu Thr Gln Ser His Lys Phe Leu Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Tyr Asn Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Ala Ser Ser Arg Tyr Thr Gly Val Pro Ser Arg Phe Thr Gly
50 55 60

Ser Gly Ser Gly Pro Asp Phe Thr Phe Thr Ile Ser Ser Val Gln Ala
65 70 75 80

Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln His Phe Arg Thr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Ala Leu
100 105

<210> 711
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 711
ggcggaggaa gcggaggtgg gggc 24

<210> 712
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 712
Gly Gly Gly Ser Gly Gly Gly Gly

1 5

<210> 713
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 713
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct actttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 714
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 714
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Asp Phe Ser Leu Glu Thr Ser Ala Asn Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 715
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 715
ggatcc 6

<210> 716
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 716
Gly Ser
1

<210> 717
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 717
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 718
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 718
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 719
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 719
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 720
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 720
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 721
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 721
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 722
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 722
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 723
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 723
ctcgag 6

<210> 724
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 724
Leu Glu
1

<210> 725
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 725
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcg 335

<210> 726
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 726
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

```
Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20                  25                  30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35                  40                  45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50                  55                  60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65                  70                  75                  80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85                  90                  95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
            100                 105                 110
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<210> 727
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 727
tcaggcggtg gctcaggtgt taac 24

<210> 728
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 728
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Ser Gly Gly Gly Ser Gly Val Asn
1               5
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<210> 729
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 729
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tccccctaag attcccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 730
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 730
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 731
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 731
gttaac 6

<210> 732
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 732
Val Asn
1

<210> 733
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 733
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaattcga ttcctctcgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccacctaag atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 734
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 734
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 735
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 735
ggatcggga 9

<210> 736
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 736
Gly Ser Gly
1

<210> 737
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 737
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 738
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 738
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 739
<211> 261
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 739
tggcatgaag gcctggaaga ggcatctcgt ttgtactttg gggaaaggaa cgtgaaaggc 60

atgtttgagg tgctggagcc cttgcacgct atgatggaac ggggccccca gactctgaag 120

gaaacatcct ttaatcaggc ctatggtcga gatttaatgg aggcccaaga gtggtgcagg 180

aagtacatga aatcagggaa tgtcaaggac ctcctccaag cctgggacct ctattatcat 240

gtgttccgac gaatctcaaa g 261

<210> 740
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 740
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 741
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 741
gtcgag 6

<210> 742
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 742
Val Glu
1

<210> 743
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 743
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa g 261

<210> 744
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 744
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 745

<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 745
tcaggcggtg gctcaggt 18

<210> 746
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 746
Ser Gly Gly Gly Ser Gly
1 5

<210> 747
<211> 921
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 747
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agccgagggc aggggaagtc ttctaacatg cggggacgtg 900

gaggaaaatc ccgggccctg a 921

<210> 748
<211> 306
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 748
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

Ile Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg
35 40 45

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
210 215 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225 230 235 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
245 250 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
260 265 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
290 295 300

Gly Pro
305

<210> 749
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 749
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 750
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 750
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 751
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 751
gtcgag 6

<210> 752
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 752
Val Gly
1

<210> 753
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 753
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 754
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 754
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 755
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 755
gtcgag 6

<210> 756
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 756
Val Gly
1

<210> 757
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 757
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 758
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 758
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 759
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 759
gtcgag 6

<210> 760
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 760
Val Gly
1

<210> 761
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 761
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 762
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 762
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 763
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 763
ccgcgg 6

<210> 764
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 764
Pro Arg
1

<210> 765
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 765
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 766

<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 766
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 767
<211> 1002
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 767
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggtttt ga 1002

<210> 768
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 768
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
35 40 45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
180 185 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
195 200 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
210 215 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225 230 235 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
245 250 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
260 265 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
275 280 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 769
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 769
atggggagta gcaagagcaa gcctaaggac cccagccagc gc 42

<210> 770
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 770
Met Gly Ser Ser Lys Ser Lys Pro Lys Asp Pro Ser Gln Arg
1 5 10

<210> 771
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 771
ctcgac 6

<210> 772
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 772
Leu Asn
1

<210> 773
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 773
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 774
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 774
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 775
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 775
gtcgag 6

<210> 776
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 776
Val Gly
1

<210> 777
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 777
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 778
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 778
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 779
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 779
gtcgag 6

<210> 780
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 780
Val Gly
1

<210> 781
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 781
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 782
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 782
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 783
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 783
gtcgag 6

<210> 784
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 784
Val Gly
1

<210> 785
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 785
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 786
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 786
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 787
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 787
ccgcgg 6

<210> 788
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 788
Pro Arg
1

<210> 789
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 789
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 790
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 790
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 791
<211> 1002
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 791
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggtttt ga 1002

<210> 792
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 792
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln

```
        35                  40                  45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
    50                  55                  60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65                  70                  75                  80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
                85                  90                  95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
            100                 105                 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
        115                 120                 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
    130                 135                 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145                 150                 155                 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
    210                 215                 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320
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Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 793
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 793
tggcatgaag gcctggaaga ggcatctcgt ttgtactttg gggaaaggaa cgtgaaaggc 60

atgtttgagg tgctggagcc cttgcacgct atgatggaac ggggcccccа gactctgaag 120

gaaacatcct ttaatcaggc ctatggtcga gatttaatgg aggcccaaga gtggtgcagg 180

aagtacatga aatcagggaa tgtcaaggac ctcctccaag cctgggacct ctattatcat 240

gtgttccgac gaatctcaaa g 261

<210> 794
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 794
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys
50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 795
<211> 6
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 795
gtcgag 6

<210> 796
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 796
Val Gly
1

<210> 797
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 797
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa g 261

<210> 798
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 798
Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg
1 5 10 15

Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala Met Met
20 25 30

Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr
35 40 45

Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys

50 55 60

Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr Tyr His
65 70 75 80

Val Phe Arg Arg Ile Ser Lys
85

<210> 799
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 799
tcaggcggtg gctcaggt 18

<210> 800
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 800
Ser Gly Gly Gly Ser Gly
1 5

<210> 801
<211> 863
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 801
tcgacggatt tggtgatgtc ggtgctcttg agagtttgag gggaaatgca gatttggctt 60

acatcctgag catggagccc tgtggccact gcctcattat caacaatgtg aacttctgcc 120

gtgagtccgg gctccgcacc cgcactggct ccaacatcga ctgtgagaag ttgcggcgtc 180

gcttctcctc gctgcatttc atggtggagg tgaagggcga cctgactgcc aagaaaatgg 240

tgctggcttt gctggagctg gcgcggcagg accacggtgc tctggactgc tgcgtggtgg 300

tcattctctc tcacggctgt caggccagcc acctgcagtt cccaggggct gtctacggca 360

cagatggatg ccctgtgtcg gtcgagaaga ttgtgaacat cttcaatggg accagctgcc 420

ccagcctggg agggaagccc aagctctttt tcatccaggc ctgtggtggg gagcagaaag 480

accatgggtt tgaggtggcc tccacttccc ctgaagacga gtcccctggc agtaaccccg 540

agccagatgc caccccgttc caggaaggtt tgaggacctt cgaccagctg gacgccatat 600

ctagtttgcc cacacccagt gacatctttg tgtcctactc tactttccca ggttttgttt 660

cctggaggga ccccaagagt ggctcctggt acgttgagac cctggacgac atctttgagc 720

agtgggctca ctctgaagac ctgcagtccc tcctgcttag ggtcgctaat gctgtttcgg 780

tgaaagggat ttataaacag atgcctggtt gctttaattt cctccggaaa aaacttttct 840

ttaaaacatc agctagcaga gcc 863

<210> 802
<211> 287
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 802
Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala
1 5 10 15

Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile
20 25 30

Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr
35 40 45

Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu
50 55 60

His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val
65 70 75 80

Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys
85 90 95

Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln
100 105 110

Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu
115 120 125

Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly
130 135 140

Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp
145 150 155 160

His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly
165 170 175

Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr

```
            180                 185                 190

Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile
        195                 200                 205

Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro
    210                 215                 220

Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln
225                 230                 235                 240

Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn
                245                 250                 255

Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn
            260                 265                 270

Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 803
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 803
ccgcgg                                                              6


<210> 804
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 804
Pro Arg
1


<210> 805
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 805
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca          54
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<210> 806
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 806
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 807
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 807
atggaatttg gcctctcctg gttgtttctc gtggccattc ttaagggtgt gcagtgctcc 60

aga 63

<210> 808
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 808
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 809
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 809
atgcat 6

<210> 810
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 810
Met His
1

<210> 811
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 811
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 812
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 812
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 813
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 813
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 814
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 814
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 815
<211> 117
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 815
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag ggtcgac 117

<210> 816
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 816
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg Val Asp
35

<210> 817
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 817
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcg 335

<210> 818
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 818
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
100 105 110

<210> 819
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 819
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 820
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 820
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 821
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 821
gtcgag 6

<210> 822
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 822
Val Glu
1

<210> 823
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 823
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 824
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 824
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln

50 55 60

<210> 825
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 825
gtcgag 6

<210> 826
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 826
Val Glu
1

<210> 827
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 827
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 828
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 828
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 829
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 829
gtcgag 6

<210> 830
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 830
Val Glu
1

<210> 831
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 831
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 832
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 832
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 833
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 833
ccgcgg 6

<210> 834
<211> 2
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 834
Pro Arg
1

<210> 835
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 835
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 836
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 836
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 837
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 837
ccatgg 6

<210> 838
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 838
Pro Trp
1

<210> 839
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 839
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 840
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 840
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 841
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 841
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 842
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 842
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 843
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 843
ggcggaggaa gcggaggtgg gggc 24

<210> 844
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 844
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 845
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 845
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 846
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 846
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 847
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 847

ggatcc 6

<210> 848
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 848
Gly Ser
1

<210> 849
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 849
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 850
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 850
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 851
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 851
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 852
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 852
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 853
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 853
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 854
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 854
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 855
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 855

gtcgac 6

<210> 856
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 856
Val Asp
1

<210> 857
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 857
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcg 335

<210> 858
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 858
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
100 105 110

<210> 859
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 859
atggggagta gcaagagcaa gcctaaggac cccagccagc gc 42

<210> 860
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 860
Met Gly Ser Ser Lys Ser Lys Pro Lys Asp Pro Ser Gln Arg
1 5 10

<210> 861
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 861
ctcgac 6

<210> 862
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 862
Leu Asp
1

<210> 863
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 863
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 864
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 864
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 865
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 865
gtcgag 6

<210> 866
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 866
Val Glu
1

<210> 867
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 867
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 868
<211> 62
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 868
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 869
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 869
gtcgag 6

<210> 870
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 870
Val Glu
1

<210> 871
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 871
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 872
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 872
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 873
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 873
gtcgag 6

<210> 874
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 874
Val Glu
1

<210> 875
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 875
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 876
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 876
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 877
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 877
ccgcgg 6

<210> 878
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 878
Pro Arg
1

<210> 879
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 879
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 880
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 880
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 881
<211> 6
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 881
ccatgg 6

<210> 882
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 882
Pro Trp
1

<210> 883
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 883
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 884
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 884
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 885
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 885

gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 886
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 886
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 887
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 887
ggcggaggaa gcggaggtgg gggc 24

<210> 888
<211> 8
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 888
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 889
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 889
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 890
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 890
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 891
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 891
ggatcc 6

<210> 892
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 892
Gly Ser
1

<210> 893
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 893
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 894
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 894
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 895

<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 895
cccgccccaa gacccccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 896
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 896
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 897
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 897
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 898
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 898
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
            20   25   30

Cys Lys Cys Pro Arg
        35

<210> 899
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 899
gtcgac   6

<210> 900
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 900
Val Asp
1

<210> 901
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 901
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc   60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc   120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat   180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc   240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc   300

tacgacgccc ttcacatgca agctcttcca cctcg   335

<210> 902
<211> 111
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 902
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
100 105 110

<210> 903
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 903
atgctcgag 9

<210> 904
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 904
Met Leu Glu
1

<210> 905
<211> 261
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 905
tggcatgaag ggttggaaga agcttcaagg ctgtacttcg gagagaggaa cgtgaagggc 60

atgtttgagg ttcttgaacc tctgcacgcc atgatggaac ggggaccgca gacactgaaa 120

gaaacctctt ttaatcaggc ctacggcaga gacctgatgg aggcccaaga atggtgtaga 180

aagtatatga aatccggtaa cgtgaaagac ctgctccagg cctgggacct ttattaccat 240

gtgttcaggc ggatcagtaa g 261

<210> 906
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 906
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Pro Lys Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 907
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 907
tcaggcggtg gctcaggtgt cgag 24

<210> 908

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 908
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 909
<211> 864
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 909
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 910
<211> 287
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 910
Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala
1 5 10 15

```
Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile
            20                  25                  30

Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr
        35                  40                  45

Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu
    50                  55                  60

His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val
65                  70                  75                  80

Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys
                85                  90                  95

Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln
            100                 105                 110

Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu
        115                 120                 125

Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly
    130                 135                 140

Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp
145                 150                 155                 160

His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly
                165                 170                 175

Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr
            180                 185                 190

Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile
        195                 200                 205

Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro
    210                 215                 220

Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln
225                 230                 235                 240

Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn
                245                 250                 255

Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn
            260                 265                 270

Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 911
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 911
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccctga 57

<210> 912
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 912
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 913
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 913
atgctcgag 9

<210> 914
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 914
Met Leu Glu
1

<210> 915
<211> 321
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 915
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 916
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 916
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu
100 105

<210> 917
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 917
tcaggcggtg gctcaggtgt cgag 24

<210> 918
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 918
Ser Gly Gly Gly Ser Gly Val Asp
1   5

<210> 919
<211> 864
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 919
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 920
<211> 287
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 920
Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala
1 5 10 15

Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile
20 25 30

Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr
35 40 45

Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu
50 55 60

His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val
65 70 75 80

Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys
85 90 95

Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln
100 105 110

Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu
115 120 125

Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly
130 135 140

Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp
145 150 155 160

His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly
165 170 175

Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr
180 185 190

Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile
195 200 205

Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro
210 215 220

Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln
225 230 235 240

Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn
245 250 255

Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn
260 265 270

Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 921
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 921
gagggcaggg gaagtcttct aacatgcggg gacgtggagg aaaatcccgg gccctga 57

<210> 922
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 922
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 923
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 923
gccacc 6

<210> 924
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 924
Ser Gly Gly Gly Ser
1 5

<210> 925
<211> 5
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 925
Gly Ser Gly Pro Arg
1 5

<210> 926
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 926
atgctcgagc aattg 15

<210> 927
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 927
Met Leu Glu Gln Leu
1 5

<210> 928
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 928
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 929
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 929
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 930
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 930
ggcgggcaat tg 12

<210> 931
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 931
Gly Gly Gln Leu
1

<210> 932
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 932
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 933
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 933
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 934
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 934
tcaggcggtg gctcaggtcc atgg 24

<210> 935
<211> 8
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 935
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 936
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 936
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 937
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 937
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

```
Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
            20                  25                  30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
        35                  40                  45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
    50                  55                  60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65                  70                  75                  80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
                85                  90                  95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
            100                 105                 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
        115                 120                 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 938

<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 938
ggatctggac cgcgg 15

<210> 939
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 939
Gly Ser Gly Pro Arg
1 5

<210> 940
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 940
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 941
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 941
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 942
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 942
ccatgg 6

<210> 943
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 943
Pro Trp
1

<210> 944
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 944
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 945
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 945
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 946
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 946
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 947
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 947
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 948
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 948
ggcggaggaa gcggaggtgg gggc 24

<210> 949
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 949
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 950
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 950
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 951
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 951
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 952
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 952
ggatcc 6

<210> 953
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 953
Gly Ser
1

<210> 954
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 954
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 955
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 955
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 956
<211> 126
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 956
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 957
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 957
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 958
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 958
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 959
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 959
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
            20   25   30

Cys Lys Cys Pro Arg
        35

<210> 960
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 960
gtcgac   6

<210> 961
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 961
Val Asp
1

<210> 962
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 962
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc   60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc   120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat   180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc   240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc   300

tacgacgccc ttcacatgca agctcttcca cctcgt   336

<210> 963
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 963
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 964
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 964
ggaacgcgtg gatcggga 18

<210> 965
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 965
Gly Thr Arg Gly Ser Gly
1 5

<210> 966
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 966
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 967
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 967
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 968
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 968
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 969
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 969
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 970
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 970
gtcgag 6

<210> 971
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 971
Val Glu
1

<210> 972
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 972
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 973
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 973
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 974
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 974
gtcgag 6

<210> 975
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 975
Val Glu
1

<210> 976
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 976
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 977
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 977
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 978
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 978
gtcgag 6

<210> 979
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 979
Val Glu
1

<210> 980
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 980
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 981
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 981
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

```
Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20                  25                  30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35                  40                  45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50                  55                  60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65                  70                  75                  80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85                  90                  95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
            100                 105
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<210> 982
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 982
tga 3

<210> 983
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 983
atgctcgagc aattg 15

<210> 984
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 984
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Met Leu Glu Gln Leu
1               5
```

<210> 985
<211> 321

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 985
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 986
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 986
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 987
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 987
ggcgggcaat tg 12

<210> 988
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 988
Gly Gly Gln Leu
1

<210> 989
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 989
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 990
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 990
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 991
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 991
tcaggcggtg gctcaggtcc atgg 24

<210> 992
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 992
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 993
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 993
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 994
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 994
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 995
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 995
ggatctggac cgcgg 15

<210> 996
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 996
Gly Ser Gly Pro Arg
1 5

<210> 997
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 997
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 998

<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 998
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 999
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 999
ccatgg 6

<210> 1000
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1000
Pro Trp
1

<210> 1001
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1001
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1002
<211> 21
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1002
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1003
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1003
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1004
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1004
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr

85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1005
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1005
ggcggaggaa gcggaggtgg gggc 24

<210> 1006
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1006
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1007
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1007
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1008
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1008
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
            20   25   30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
    50   55   60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            100   105   110

<210> 1009
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1009
ggatcc   6

<210> 1010
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1010
Gly Ser
1

<210> 1011
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1011
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1012
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1012
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1013
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1013
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1014
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1014
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1015
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1015
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1016
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1016
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1017
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1017
gtcgac 6

<210> 1018
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1018
Val Asp
1

<210> 1019
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1019
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1020
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1020
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1021
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1021
ggaacgcgtg gatcggga 18

<210> 1022
<211> 6

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1022
Gly Thr Arg Gly Ser Gly
1 5

<210> 1023
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1023
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1024
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1024
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1025
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1025
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1026
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1026
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1027
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1027
gtcgag 6

<210> 1028
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1028
Val Glu
1

<210> 1029
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1029
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1030
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1030
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1031
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1031
gtcgag 6

<210> 1032
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1032
Val Glu
1

<210> 1033
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1033
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1034
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1034
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp

20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1035
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1035
gtcgag 6

<210> 1036
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1036
Val Glu
1

<210> 1037
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1037
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1038
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1038
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1039
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1039
tga 3

<210> 1040
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1040
atgctcgag 9

<210> 1041
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1041
Met Leu Glu
1

<210> 1042
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1042
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1043
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1043
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1044
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1044
tcaggcggtg gctcaggt 18

<210> 1045
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1045
Ser Gly Gly Gly Ser Gly
1 5

<210> 1046
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1046
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctc 318

<210> 1047
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1047
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65   70   75   80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu
            100   105

<210> 1048
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1048
tcgggggcg gatcaggagt cgac   24

<210> 1049
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1049
Ser Gly Gly Gly Ser Val Asp
1   5

<210> 1050
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1050
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1051
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1051
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe

100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 1052
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1052
ccgcgg 6

<210> 1053
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1053
Pro Arg
1

<210> 1054
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1054
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1055
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1055
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1056
<211> 999
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1056
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggttt 999

<210> 1057
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1057
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
35 40 45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro

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                165                 170                 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
    210                 215                 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325                 330


<210> 1058
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1058
tga                                                                   3


<210> 1059
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1059
atgctcgag                                                             9
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<210> 1060
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1060
Met Leu Glu
1

<210> 1061
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1061
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctc 318

<210> 1062
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1062
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr

65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu
100 105

<210> 1063
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1063
tcgggggcg gatcagg 17

<210> 1064
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1064
Ser Gly Gly Gly Ser
1 5

<210> 1065
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1065
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1066
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1066
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1067
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1067
tcaggcggtg gctcaggtgt cgac 24

<210> 1068
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1068
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 1069
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1069
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagaccat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1070
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1070
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 1071
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1071
ccgcgg 6

<210> 1072
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1072

Pro Arg
1

<210> 1073
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1073
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1074
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1074
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1075
<211> 999
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1075
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggttt 999

<210> 1076
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1076
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
35 40 45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

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Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
            180                 185                 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
    210                 215                 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325                 330
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<210> 1077
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1077
tga 3

<210> 1078
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1078
atgctcgagc aattg 15

<210> 1079

<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1079
Met Leu Glu Gln Leu
1 5

<210> 1080
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1080
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1081
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1081
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1082
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1082
ggcgggcaat tg 12

<210> 1083
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1083
Gly Gly Gln Leu
1

<210> 1084
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1084
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctgc ttcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1085
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1085
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1   5   10   15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
            20   25   30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
        35   40   45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
    50   55   60

Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp Leu Tyr
65   70   75   80

Tyr His Val Phe Arg Arg Ile Ser Lys
                85

<210> 1086
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1086
tcaggcggtg gctcaggtcc atgg   24

<210> 1087
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1087
Ser Gly Gly Gly Ser Gly Pro Trp
1   5

<210> 1088
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1088
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc   60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag   120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1089
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1089
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 1090
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1090
ggatctggac cgcgg 15

<210> 1091
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1091
Gly Ser Gly Pro Arg
1 5

<210> 1092
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1092
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1093
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1093
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1094
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1094
ccatgg 6

<210> 1095
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1095
Pro Trp
1

<210> 1096
<211> 63
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1096
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1097
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1097
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1098
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1098
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1099
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1099
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile

20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1100
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1100
ggcggaggaa gcggaggtgg gggc 24

<210> 1101
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1101
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1102
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1102
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1103
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1103
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 1104
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1104
ggatcc 6

<210> 1105
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1105
Gly Ser
1

<210> 1106
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1106
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1107
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1107
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1108
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1108
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1109
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1109
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val

20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1110
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1110
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1111
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1111
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1112
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1112
gtcgac 6

<210> 1113
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1113
Val Asp
1

<210> 1114
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1114
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1115
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1115
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1116
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1116
ggaacgcgtg gatcggga 18

<210> 1117
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1117
Gly Thr Arg Gly Ser Gly
1 5

<210> 1118
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1118
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1119
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1119
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1120
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1120
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1121
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1121
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1122
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1122
gtcgag 6

<210> 1123
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1123
Val Glu
1

<210> 1124
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1124
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1125
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1125

Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1   5   10   15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
            20   25   30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
        35   40   45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
    50   55   60

<210> 1126
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1126
gtcgag   6

<210> 1127
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1127
Val Glu
1

<210> 1128
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1128
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa   60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga   120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag   180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac   240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac   300

gtcgaactgt tgaagctcga a   321

<210> 1129
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1129
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1130
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1130
gtcgag 6

<210> 1131
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1131
Val Glu
1

<210> 1132

<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1132
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1133
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1133
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1134
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1134
tga 3

<210> 1135
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1135
atgctcgagc aattg 15

<210> 1136
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1136
Met Leu Glu Gln Leu
1 5

<210> 1137
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1137
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1138
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1138
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65   70   75   80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
            100   105

<210> 1139
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1139
ggcgggcaat tg   12

<210> 1140
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1140
Gly Gly Gln Leu
1

<210> 1141
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1141
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1142
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1142
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1143
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1143
tcaggcggtg gctcaggtcc atgg 24

<210> 1144
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1144
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 1145
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1145
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt caattcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1146
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1146
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly

```
        35                  40                  45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
    50                  55                  60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65                  70                  75                  80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
                85                  90                  95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
            100                 105                 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
        115                 120                 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1147
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
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<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1147
ggatctggac cgcgg 15

<210> 1148
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1148
Gly Ser Gly Pro Arg
1 5

<210> 1149
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1149
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1150
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1150
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1151
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1151
ccatgg 6

<210> 1152
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1152
Pro Trp
1

<210> 1153
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1153
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1154
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1154
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1155
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1155
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1156
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1156
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1157
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1157
ggcggaggaa gcggaggtgg gggc 24

<210> 1158
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1158
Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 1159
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1159
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc   336

<210> 1160
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1160
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
            20   25   30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
    50   55   60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            100   105   110

<210> 1161

<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1161
ggatcc 6

<210> 1162
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1162
Gly Ser
1

<210> 1163
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1163
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1164
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1164
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1165
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1165
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1166
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1166
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1167
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1167
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1168
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1168
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1169

<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1169
gtcgac 6

<210> 1170
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1170
Val Asp
1

<210> 1171
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1171
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1172
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1172
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

```
Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35                  40                  45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50                  55                  60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65                  70                  75                  80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85                  90                  95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100                 105                 110
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<210> 1173
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1173
ggaacgcgtg gatcggga 18

<210> 1174
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1174
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Gly Thr Arg Gly Ser Gly
1               5
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<210> 1175
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1175
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1176
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1176
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1177
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1177
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1178
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1178
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu

50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1179
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1179
gtcgag 6

<210> 1180
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1180
Val Glu
1

<210> 1181
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1181
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1182
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1182
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1183
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1183
gtcgag 6

<210> 1184
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1184
Val Glu
1

<210> 1185
<211> 321

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1185
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1186
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1186
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1187
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 1187
gtcgag 6

<210> 1188
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1188
Val Glu
1

<210> 1189
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1189
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1190
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1190
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala

50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1191
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1191
tga 3

<210> 1192
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1192
atgctcgagc aattg 15

<210> 1193
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1193
Met Leu Glu Gln Leu
1 5

<210> 1194
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1194

ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1195
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1195
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1196
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1196
ggcgggcaat tg 12

<210> 1197
<211> 4
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1197
Gly Gly Gln Leu
1

<210> 1198
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1198
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1199
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1199
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1200
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1200
tcaggcggtg gctcaggtcc atgg 24

<210> 1201
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1201
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 1202
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1202
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt caattcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1203
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1203
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 1204
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1204
ggatctggac cgcgg 15

<210> 1205
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1205
Gly Ser Gly Pro Arg
1 5

<210> 1206
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1206
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1207
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1207
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1208
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1208
ccatgg 6

<210> 1209
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1209
Pro Trp
1

<210> 1210
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1210
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1211
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1211
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
            20

<210> 1212
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1212
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa   318

<210> 1213
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1213
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
            20   25   30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
        35   40   45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50   55   60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65   70   75   80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
                85   90   95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1214
<211> 24

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1214
ggcggaggaa gcggaggtgg gggc 24

<210> 1215
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1215
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1216
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1216
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1217
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1217
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
    50   55   60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            100   105   110

<210> 1218
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1218
ggatcc   6

<210> 1219
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1219
Gly Ser
1

<210> 1220
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1220
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt   48

<210> 1221
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1221
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1   5   10   15

<210> 1222
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1222
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1223
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1223
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1   5   10   15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
            20   25   30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
        35   40

<210> 1224
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1224
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1225
<211> 37

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1225
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1226
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1226
gtcgac 6

<210> 1227
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1227
Val Asp
1

<210> 1228
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1228
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1229
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1229
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1230
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1230
ggaacgcgtg gatcggga 18

<210> 1231
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1231

Gly Thr Arg Gly Ser Gly
1   5

<210> 1232
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1232
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct   57

<210> 1233
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1233
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1   5   10   15

Pro Gly Pro

<210> 1234
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1234
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt   60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg   120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag   180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga   240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac   300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag   360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg   420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt   480

ttcgatgcct tcatctgcta ttgccccagc gacatc   516

<210> 1235
<211> 172

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1235
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1236
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1236
gtcgag 6

<210> 1237
<211> 2

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1237
Val Glu
1

<210> 1238
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1238
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1239
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1239
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1240
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1240
gtcgag 6

<210> 1241
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1241
Val Glu
1

<210> 1242
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1242
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1243
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1243
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1244
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1244
tga 3

<210> 1245
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1245
atgctcgagc aattg 15

<210> 1246
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1246
Met Leu Glu Gln Leu
1 5

<210> 1247
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1247
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1248
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1248
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1249
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1249
ggcgggcaat tg 12

<210> 1250
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1250
Gly Gly Gln Leu
1

<210> 1251
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1251
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1252
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1252
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1253

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1253
tcaggcggtg gctcaggtcc atgg 24

<210> 1254
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1254
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 1255
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1255
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt caattcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1256
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1256
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp

225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Gln Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 1257
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1257
ggatctggac cgcgg 15

<210> 1258
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1258
Gly Ser Gly Pro Arg
1 5

<210> 1259
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1259
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1260
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1260

Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1   5   10   15

Gly Pro

<210> 1261
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1261
ccatgg   6

<210> 1262
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1262
Pro Trp
1

<210> 1263
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1263
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc   60

agg   63

<210> 1264
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1264
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys Ser Arg

20

<210> 1265
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1265
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1266
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1266
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1267
<211> 24
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1267
ggcggaggaa gcggaggtgg gggc 24

<210> 1268
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1268
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1269
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1269
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1270
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1270
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

```
Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
    50                  55                  60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65                  70                  75                  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            100                 105                 110
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<210> 1271
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1271
ggatcc 6

<210> 1272
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1272
Gly Ser
1

<210> 1273
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1273
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1274
<211> 16
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1274
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1275
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1275
cccgccccaa gacccccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1276
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1276
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1277
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1277
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1278
<211> 37
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1278
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1279
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1279
gtcgac 6

<210> 1280
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1280
Val Asp
1

<210> 1281
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1281
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1282
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1282
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1283
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1283
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 1284
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1284
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn

1 5 10 15

Pro Gly Pro

<210> 1285
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1285
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1286
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1286
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu

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                85                  90                  95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
            100                 105                 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
        115                 120                 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
    130                 135                 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145                 150                 155                 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
                165                 170
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<210> 1287
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1287
gtcgag 6

<210> 1288
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1288
Val Glu
1

<210> 1289
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1289
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1290
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1290
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1291
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1291
tga 3

<210> 1292
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1292
atgctcgagc aattg 15

<210> 1293
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1293

Met Leu Glu Gln Leu
1 5

<210> 1294
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1294
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1295
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1295
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1296
<211> 12

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1296
ggcgggcaat tg 12

<210> 1297
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1297
Gly Gly Gln Leu
1

<210> 1298
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1298
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1299
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1299
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln

35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1300
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1300
tcaggcggtg gctcaggtcc atgg 24

<210> 1301
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1301
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 1302
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1302
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1303
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1303
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser

```
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1304
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1304
ggatctggac cgcgg                                                    15


<210> 1305
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1305
Gly Ser Gly Pro Arg
1               5


<210> 1306
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"
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<400> 1306
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1307
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1307
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1308
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1308
ccatgg 6

<210> 1309
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1309
Pro Trp
1

<210> 1310
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1310
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1311
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1311
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys Ser Arg
            20

<210> 1312
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1312
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1313
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1313
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
            20   25   30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
        35   40   45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50   55   60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1314
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1314
ggcggaggaa gcggaggtgg gggc 24

<210> 1315
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1315
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1316
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1316
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1317
<211> 112
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1317
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 1318
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1318
ggatcc 6

<210> 1319
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1319
Gly Ser
1

<210> 1320
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1320
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1321
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1321
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1322
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1322
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1323
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1323
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1324
<211> 111
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1324
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1325
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1325
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1326
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1326
gtcgac 6

<210> 1327
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1327
Val Asp
1

<210> 1328
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1328
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1329
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1329
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1330
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1330
ggaacgcgtg gatcggga 18

<210> 1331
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1331
Gly Thr Arg Gly Ser Gly
1 5

<210> 1332
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1332
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1333
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1333
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1334
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1334
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1335
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1335
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1336

<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1336
gtcgag 6

<210> 1337
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1337
Val Glu
1

<210> 1338
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1338
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1339
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1339
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
    50   55   60

<210> 1340
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1340
gtcgag   6

<210> 1341
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1341
Val Glu
1

<210> 1342
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1342
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa   60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga   120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag   180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac   240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac   300

gtcgaactgt tgaagctcga a   321

<210> 1343
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1343
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65   70   75   80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
            100   105

<210> 1344
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1344
gtcgag   6

<210> 1345
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1345
Val Glu
1

<210> 1346
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1346

ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaatttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1347
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1347
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1348
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1348
tga 3

<210> 1349
<211> 516
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1349
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1350
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1350
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
    130   135   140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145   150   155   160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
                165   170

<210> 1351
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1351
gtcgag   6

<210> 1352
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1352
Val Glu
1

<210> 1353
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1353
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag   60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta   120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag   180

agacag   186

<210> 1354
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1354
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1355
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1355
ggatctggac cgcgg 15

<210> 1356
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1356
Gly Ser Gly Pro Arg
1 5

<210> 1357
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1357
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1358
<211> 18
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1358
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1359
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1359
ccacgg 6

<210> 1360
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1360
Pro Arg
1

<210> 1361
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1361
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1362
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1362

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Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1               5                   10                  15


Val Gln Cys Ser Arg
            20


<210> 1363
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1363
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc       60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca      120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca      180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa      240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg      300

gggactaagt tggaaataac a                                                321


<210> 1364
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1364
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1               5                   10                  15


Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20                  25                  30


Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35                  40                  45


Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60


Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80


Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85                  90                  95


Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
            100                 105
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<210> 1365
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1365
ggcggaggaa gcggaggtgg gggc 24

<210> 1366
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1366
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1367
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1367
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1368
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1368
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
            20   25   30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
        35   40   45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
    50   55   60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65   70   75   80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
                85   90   95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
            100   105   110

Gly Thr Ser Val Thr Val Ser Ser
        115   120

<210> 1369
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1369
ggatcc   6

<210> 1370
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1370
Gly Ser
1

<210> 1371
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1371

gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1372
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1372
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1373
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1373
cccgccccaa gacccccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1374
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1374
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1375
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1375
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1376
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1376
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1377
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1377
gtcgac 6

<210> 1378
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1378
Val Asp
1

<210> 1379
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1379

agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1380
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1380
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1381
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1381
atggggagta gcaagagcaa gcctaaggac cccagccagc gc 42

<210> 1382
<211> 14
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1382
Met Gly Ser Ser Lys Ser Lys Pro Lys Asp Pro Ser Gln Arg
1   5   10

<210> 1383
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1383
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1384
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1384
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1   5   10   15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
            20   25   30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
        35   40   45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
    50   55   60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1385
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1385
gtcgag 6

<210> 1386
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1386
Val Glu
1

<210> 1387
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1387
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1388
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1388
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1389
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1389
ggatctggac cgcgg 15

<210> 1390
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1390
Gly Ser Gly Pro Arg
1 5

<210> 1391
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1391
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1392
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1392
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1393
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1393
ccacgg 6

<210> 1394
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1394
Pro Arg
1

<210> 1395
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1395
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1396
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1396
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1397
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1397
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1398
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1398
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65   70   75   80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
            100   105

<210> 1399
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1399
ggcggaggaa gcggaggtgg gggc   24

<210> 1400
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1400
Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 1401
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1401
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc   60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct   120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat   180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta   240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac   300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca   360

<210> 1402
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1402
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1403
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1403
ggatcc 6

<210> 1404
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1404

Gly Ser
1

<210> 1405
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1405
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1406
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1406
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1407
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1407
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1408
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1408
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1409
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1409
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1410
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1410
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1411
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1411
gtcgac 6

<210> 1412
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1412

Val Asp
1

<210> 1413
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1413
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1414
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1414
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1415
<211> 63

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1415
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1416
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1416
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1417
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1417
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1418
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1418
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly

1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 1419
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1419
ggcggaggaa gcggaggtgg gggc 24

<210> 1420
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1420
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1421
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1421
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1422
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1422
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1423
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1423
ggatcc 6

<210> 1424

<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1424
Gly Ser
1

<210> 1425
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1425
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1426
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1426
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1427
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1427
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1428
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide"

<400> 1428
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1429
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1429
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1430
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1430
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1431
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1431
gtcgac 6

<210> 1432

<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1432
Val Asp
1

<210> 1433
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1433
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1434
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1434
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1435
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1435
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1436
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1436
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1437
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1437
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1438
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1438
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1439
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1439
gtcgag 6

<210> 1440
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1440
Val Glu
1

<210> 1441
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1441
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1442
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1442
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1443
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1443
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1444
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1444
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1445
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1445
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1446
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1446
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35   40   45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65   70   75   80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
            100   105

<210> 1447
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1447
ggcggaggaa gcggaggtgg gggc   24

<210> 1448
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1448
Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 1449
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1449
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc   60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct   120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat   180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1450
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1450
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1451
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1451
ggatcc 6

<210> 1452
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1452
Gly Ser
1

<210> 1453
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1453
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1454
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1454
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1455
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1455
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1456
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1456

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1457
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1457
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1458
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1458
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1459
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1459
gtcgac 6

<210> 1460
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1460
Val Asp
1

<210> 1461
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1461
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1462
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1462
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1463
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1463
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1464
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1464
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1465
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1465
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1466

<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1466
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1467
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1467
gtcgag 6

<210> 1468

<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1468
Val Glu
1

<210> 1469
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1469
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1470
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1470
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1471
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1471
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1472
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1472
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1473
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1473
gtcgag 6

<210> 1474
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1474
Val Glu
1

<210> 1475
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1475
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1476
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1476
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1477
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1477
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1478
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1478
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1479
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1479
gtcgag 6

<210> 1480
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1480
Val Glu
1

<210> 1481
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1481
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1482
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1482
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1483
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1483
ggatctggac cgcgg 15

<210> 1484
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1484
Gly Ser Gly Pro Arg
1 5

<210> 1485
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 1485
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1486
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1486
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1487
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1487
ccacgg 6

<210> 1488
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1488
Pro Arg
1

<210> 1489
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1489
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1490
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1490
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys Ser Arg
            20

<210> 1491
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1491
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1492
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1492
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1   5   10   15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35   40   45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 1493
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1493
ggcggaggaa gcggaggtgg gggc 24

<210> 1494
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1494
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1495
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1495
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1496
<211> 120

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1496
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1497
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1497
ggatcc 6

<210> 1498
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1498
Gly Ser
1

<210> 1499
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1499
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1500
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1500
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1501
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1501
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1502
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1502
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1503
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1503
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1504
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1504
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1505
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1505
gtcgac 6

<210> 1506
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1506
Val Asp
1

<210> 1507
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1507
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1508
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1508
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1509
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1509
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1510
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1510
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu

130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1511
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1511
gtcgag 6

<210> 1512
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1512
Val Glu
1

<210> 1513
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1513
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1514
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1514
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1   5   10   15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
            20   25   30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
        35   40   45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
    50   55   60

<210> 1515
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1515
gtcgag   6

<210> 1516
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1516
Val Glu
1

<210> 1517
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1517
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag   60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg   120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag   180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac   240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat   300

gtggagctgc tgaagctgga a   321

<210> 1518
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1518
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1519
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1519
ggatctggac cgcgg 15

<210> 1520
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1520
Gly Ser Gly Pro Arg
1 5

<210> 1521
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1521
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1522
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1522
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1523
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1523
ccacgg 6

<210> 1524
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1524
Pro Arg
1

<210> 1525
<211> 63
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1525
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1526
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1526
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1527
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1527
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1528
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1528
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr

20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 1529
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1529
ggcggaggaa gcggaggtgg gggc 24

<210> 1530
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1530
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1531
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1531
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1532
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1532
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1533
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1533
ggatcc 6

<210> 1534
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1534
Gly Ser
1

<210> 1535
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1535
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1536
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1536
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1537
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1537
cccgccccaa gacccccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1538
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1538
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro

1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1539
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1539
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1540
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1540
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1541
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1541
gtcgac 6

<210> 1542
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1542
Val Asp
1

<210> 1543
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1543
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1544
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1544
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1545
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1545
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1546
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1546
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1547
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1547
gtcgag 6

<210> 1548
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1548
Val Glu
1

<210> 1549
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1549
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1550
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1550
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1551
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1551
gtcgag 6

<210> 1552
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1552
Val Glu
1

<210> 1553
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1553
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1554
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1554
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1555
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1555
gtcgag 6

<210> 1556
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1556
Val Glu
1

<210> 1557
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1557
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 1558
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1558
Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 1559
<211> 9

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1559
ggctcaggt 9

<210> 1560
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1560
Gly Ser Gly
1

<210> 1561
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1561
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1562
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1562
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1563
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1563
ccacgg 6

<210> 1564
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1564
Pro Arg
1

<210> 1565
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1565
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1566
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1566
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1567
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1567
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1568
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1568
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 1569
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1569
ggcggaggaa gcggaggtgg gggc 24

<210> 1570
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1570
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1571
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1571
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1572
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1572
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln

100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1573
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1573
ggatcc 6

<210> 1574
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1574
Gly Ser
1

<210> 1575
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1575
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1576
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1576
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1577
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1577
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1578
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1578
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1579
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1579
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1580
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1580
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val

20 25 30

Cys Lys Cys Pro Arg
35

<210> 1581
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1581
gtcgac 6

<210> 1582
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1582
Val Asp
1

<210> 1583
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1583
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1584
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1584
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 1585
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1585
ggttccgga   9

<210> 1586
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1586
Gly Ser Gly
1

<210> 1587
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1587
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1588
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1588
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1589
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1589
ggatctgga 9

<210> 1590
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1590
Gly Ser Gly
1

<210> 1591
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1591
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 1592
<211> 19
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1592
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1593
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1593
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1594
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1594
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1595
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1595
gtcgag 6

<210> 1596
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1596
Val Glu
1

<210> 1597
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1597
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1598
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1598
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1599
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1599
gtcgag 6

<210> 1600
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1600
Val Glu
1

<210> 1601

<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1601
gtcgag 6

<210> 1602
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1602
Val Glu
1

<210> 1603
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1603
tcaggcggtg gctcaggtcc gcggtga 27

<210> 1604
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1604
Ser Gly Gly Gly Ser Gly Pro Arg
1 5

<210> 1605
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1605
atgctcgagc aattggag 18

<210> 1606
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1606
Met Leu Glu Gln Leu Glu
1   5

<210> 1607
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1607
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 1608
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1608
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr

65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1609
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1609
tcaggcggtg gctcaggtgt ggac 24

<210> 1610
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1610
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 1611
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1611
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1612
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1612
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe

```
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1613
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1613
ggatctggac cgcgg                                                    15


<210> 1614
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1614
Gly Ser Gly Pro Arg
1               5


<210> 1615
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1615
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca          54
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<210> 1616
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1616
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1617
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1617
ccacgg 6

<210> 1618
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1618
Pro Arg
1

<210> 1619
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1619
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1620
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1620
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1   5   10   15

Val Gln Cys Ser Arg
            20

<210> 1621
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1621
gacatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gggcaagtca ggacattagt aaatatttaa attggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctaccat acatcaagat tacactcagg agtcccatca 180

aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggagcaa 240

gaagatattg ccacttactt ttgccaacag ggtaatacgc ttccgtacac gttcggaggg 300

gggactaagt tggaaataac a 321

<210> 1622
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1622
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1   5   10   15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35   40   45

Tyr His Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65   70   75   80

Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
100 105

<210> 1623
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1623
ggcggaggaa gcggaggtgg gggc 24

<210> 1624
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1624
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1625
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1625
gaggtgaaac tgcaggagtc aggacctggc ctggtggcgc cctcacagag cctgtccgtc 60

acatgcactg tctcaggggt ctcattaccc gactatggtg taagctggat tcgccagcct 120

ccacgaaagg gtctggagtg gctgggagta atatggggta gtgaaaccac atactataat 180

tcagctctca aatccagact gaccatcatc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatttact actgtgccaa acattattac 300

tacggtggta gctatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 1626
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1626
Glu Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
1 5 10 15

Ser Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

Gly Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu
35 40 45

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys
50 55 60

Ser Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
65 70 75 80

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 1627
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1627
ggatcc 6

<210> 1628
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1628
Gly Ser
1

<210> 1629
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1629
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1630
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1630
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1631
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1631
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1632
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1632
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1633
<211> 111
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1633
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1634
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1634
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1635
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1635
gtcgac 6

<210> 1636
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1636
Val Asp
1

<210> 1637
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1637
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1638
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1638
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1639
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1639
ggttccgga 9

<210> 1640
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1640
Gly Ser Gly
1

<210> 1641
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1641
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1642
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1642
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1643
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1643
ggatctgga 9

<210> 1644
<211> 3
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1644
Gly Ser Gly
1

<210> 1645
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1645
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 1646
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1646
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1647
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1647
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1648
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1648
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1649
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 1649
gtcgag 6

<210> 1650
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1650
Val Glu
1

<210> 1651
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1651
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1652
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1652
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1653

<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1653
gtcgag 6

<210> 1654
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1654
Val Glu
1

<210> 1655
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1655
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1656
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1656
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1657
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1657
gtcgag 6

<210> 1658
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1658
Val Glu
1

<210> 1659
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1659
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 1660
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1660
Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 1661
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1661
tcaggcggtg gctcaggtcc gcggtga 27

<210> 1662
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1662
Ser Gly Gly Gly Ser Gly Pro Arg
1 5

<210> 1663

<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1663
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1664
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1664
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro

115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1665
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1665
gtcgag 6

<210> 1666
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1666
Val Glu
1

<210> 1667
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1667
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1668
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1668
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1669
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1669
gtcgag 6

<210> 1670
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1670
Val Glu
1

<210> 1671
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1671
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1672
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1672
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1673
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1673
gtcgag 6

<210> 1674
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1674
Val Glu
1

<210> 1675
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1675
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agcccttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1676
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1676
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1677

<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1677
ccgcgg 6

<210> 1678
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1678
Pro Arg
1

<210> 1679
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1679
gagggcagag gcagcctcct gacatgtggg gacgtcgagg agaaccctgg ccca 54

<210> 1680
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1680
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1681
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 1681
ccttgg 6

<210> 1682
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1682
Pro Trp
1

<210> 1683
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1683
atggagttcg gattgagctg gctgttcctg gtggcaatac tcaagggcgt tcaatgttca 60

cgg 63

<210> 1684
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1684
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1685
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1685
gaaattgtgc tgactcagag cccgggtagc ctggccgtgt cccccggaga gcgagtgacc 60

atgagctgta aatccagcca atcagttttt ttttcatcat ctcaaaaaaa ctatctggca 120

tggtaccaac agatacccgg gcagtcccca cggctgctga tttactgggc atcaacacgc 180

gagagcggtg tgcccgacag attcaccgga agcgggagcg gcacggactt cacacttacc 240

atctcaagcg tacaaccgga ggacttggct atctattact gccaccaata tctttcctcc 300

agaacattcg gacagggaac gaaactggag atcaaaaga 339

<210> 1686
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1686
Glu Ile Val Leu Thr Gln Ser Pro Gly Ser Leu Ala Val Ser Pro Gly
1 5 10 15

Glu Arg Val Thr Met Ser Cys Lys Ser Ser Gln Ser Val Phe Phe Ser
20 25 30

Ser Ser Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Ile Pro Gly Gln
35 40 45

Ser Pro Arg Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Ile Tyr Tyr Cys His Gln
85 90 95

Tyr Leu Ser Ser Arg Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg

<210> 1687
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1687
ggcggcggga gtgggggagg aggt 24

<210> 1688

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1688
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1689
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1689
caggtg 6

<210> 1690
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1690
Gln Val
1

<210> 1691
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1691
caggtgcagc tgcagcagcc tggagccgag gtggtgaagc ccggcgcatc tgtgaaaatg 60

tcttgcaagg caagcggata tacatttact agctactaca tccattggat caagcaaacc 120

cccggacagg gcctcgaatg ggtgggagtt atttacccgg ggaacgatga tatctcttat 180

aatcagaaat tccaagggaa agccaccctg actgcagaca aatcaagtac cacagcctat 240

atgcagctca gctccctgac aagcgaggat tccgctgtgt actactgtgc cagggaggtt 300

agacttcgat attttgatgt ttgggggcag ggaactaccg tgaccgtgag cagc 354

<210> 1692
<211> 118

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1692
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Val Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Tyr Ile His Trp Ile Lys Gln Thr Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Val Ile Tyr Pro Gly Asn Asp Asp Ile Ser Tyr Asn Gln Lys Phe
50 55 60

Gln Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Val Arg Leu Arg Tyr Phe Asp Val Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 1693
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1693
ggctcc 6

<210> 1694
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1694
Gly Ser
1

<210> 1695
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1695
gagctgccaa cccagggaac tttttcaaat gtatcaacta acgtctca 48

<210> 1696
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1696
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1697
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1697
cccgcgccac gaccaccaac accagcccca accattgcat cccagccttt gtctctccgg 60

cccgaggctt gtcgccccgc cgccgggggt gccgtccata cccgaggcct ggacttcgcc 120

tgcgat 126

<210> 1698
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1698
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1699
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1699
atatatattt gggctcctct ggccggtacc tgcggcgtac tgctcctgtc actggtaata 60

accctgtatt gcaatcacag gaacagaagg agagtctgta agtgcccccg c 111

<210> 1700
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1700
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1701
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1701
gtcgac 6

<210> 1702
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1702
Val Asp
1

<210> 1703
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1703
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1704
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1704
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1705
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1705
tga 3

<210> 1706
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1706
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1707
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1707
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1708
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1708
gtcgag 6

<210> 1709
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1709
Val Glu
1

<210> 1710
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1710
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1711
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1711
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1712
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1712
gtcgag 6

<210> 1713
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1713
Val Glu
1

<210> 1714
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1714
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1715
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1715
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1716
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1716
gtcgag 6

<210> 1717
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1717
Val Glu
1

<210> 1718
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1718
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1719
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1719
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1720
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1720
ccgcgg 6

<210> 1721
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1721
Pro Arg
1

<210> 1722
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1722
gagggcagag gcagcctcct gacatgtggg gacgtcgagg agaaccctgg ccca 54

<210> 1723
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1723
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1724
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1724
ccttgg 6

<210> 1725
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1725
Pro Trp
1

<210> 1726
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1726
atggagttcg gattgagctg gctgttcctg gtggcaatac tcaagggcgt tcaatgttca 60

cgg 63

<210> 1727
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1727
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1728
<211> 348
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1728
cagatccaac tggtgcagtc aggcccggaa ctgaagaagc caggggagac agtcaaaata 60

agttgtaaag ccagcggcta catatttact aattacggga tgaattgggt gaagcaagcg 120

ccgggcaaat cctttaaatg gatggggtgg ataaacacat acacaggaga gtcaacgtac 180

agcgcggact tcaaaggtcg attcgcgttc agtctcgaga ccagcgcgag tacagcttac 240

ctccacatca acgatcttaa aaacgaagac acggcaacct atttttgcgc ccggtcaggc 300

ggttacgacc ctatggacta ttggggccaa gggacctccg ttacggta 348

<210> 1729
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1729
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Ser Phe Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser Ala Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu His Ile Asn Asp Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Ser Val Thr Val
115

<210> 1730
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1730
tcttcaggcg gtggcgggag tggtggagga ggctcaggcg gcgggggatc a 51

<210> 1731
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1731
Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
1 5 10 15

Ser

<210> 1732
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1732
gacatcgtac tgacccaatc tcccgctagc cttgcagtat ccttgggtca acgcgctaca 60

ataagttgcc gggctagtga gtccgtagac aactatggca acaccttcat gcattggtac 120

caacaaaaac caggtcagcc acccaaactt ctcatttaca gagcgtctaa tctcgaaagc 180

ggcatccctg ctcgattctc tggaagcgga agtagaaccg actttacact gactataaac 240

cccgtcgaag ccgatgatgt tgccacttat tactgtcaac agagcaatga ggacccaccg 300

acattcggtg ctggtaccaa gctggagttg aaggagtcaa aatacgggcc tccctgtccc 360

<210> 1733
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1733
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr
20 25 30

Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asn
65 70 75 80

Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln Gln Ser Asn
85 90 95

Glu Asp Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Glu
100 105 110

Ser Lys Tyr Gly Pro Pro Cys Pro
115 120

<210> 1734
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1734
ggctcc 6

<210> 1735
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1735
Gly Ser
1

<210> 1736
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1736
gagctgccaa cccagggaac tttttcaaat gtatcaacta acgtctca 48

<210> 1737
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1737
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1   5   10   15

<210> 1738
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1738
cccgcgccac gaccaccaac accagcccca accattgcat cccagccttt gtctctccgg 60

cccgaggctt gtcgccccgc cgccgggggt gccgtccata cccgaggcct ggacttcgcc 120

tgcgat 126

<210> 1739
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1739
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1   5   10   15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
            20   25   30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
        35   40

<210> 1740
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1740
atatatattt gggctcctct ggccggtacc tgcggcgtac tgctcctgtc actggtaata 60

accctgtatt gcaatcacag gaacagaagg agagtctgta agtgcccccg c 111

<210> 1741
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1741
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1742
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1742
gtcgac 6

<210> 1743
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1743
Val Asp
1

<210> 1744
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1744
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1745
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1745
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1746
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1746
tga 3

<210> 1747
<211> 267
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1747
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1748
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1748
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1749
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1749
tcaggcggtg gctcaggt 18

<210> 1750
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1750
Ser Gly Gly Gly Ser Gly
1 5

<210> 1751
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1751
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctc 318

<210> 1752
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1752
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu
100 105

<210> 1753
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1753
tcgggggcg gatcagg 17

<210> 1754
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1754
Ser Gly Gly Gly Ser
1 5

<210> 1755
<211> 864
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1755
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 1756
<211> 288
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1756
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

Ile Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg
35 40 45

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65 70 75 80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
85 90 95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
100 105 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
115 120 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
130 135 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145 150 155 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
165 170 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
180 185 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
195 200 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210   215   220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225   230   235   240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245   250   255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260   265   270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275   280   285

<210> 1757
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1757
ccgcgg   6

<210> 1758
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1758
Pro Arg
1

<210> 1759
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1759
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca   54

<210> 1760
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1760
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1   5   10   15

Gly Pro

<210> 1761
<211> 999
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1761
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggttt 999

<210> 1762
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1762
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
35 40 45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
180 185 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
195 200 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
210 215 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225 230 235 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
245 250 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
260 265 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275   280   285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290   295   300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305   310   315   320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325   330

<210> 1763
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1763
tga   3

<210> 1764
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1764
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa   60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtcga cagtagtaga   120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag   180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac   240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac   300

gtcgaactgt tgaagctc   318

<210> 1765
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1765
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu
100 105

<210> 1766
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1766
tcgggggcg gatcagg 17

<210> 1767
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1767
Ser Gly Gly Gly Ser
1 5

<210> 1768
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1768
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1769
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1769
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1770
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1770
tcaggcggtg gctcaggt 18

<210> 1771
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1771
Ser Gly Gly Gly Ser Gly
1 5

<210> 1772
<211> 864
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1772
gtcgacggat ttggtgatgt cggtgctctt gagagtttga ggggaaatgc agatttggct 60

tacatcctga gcatggagcc ctgtggccac tgcctcatta tcaacaatgt gaacttctgc 120

cgtgagtccg ggctccgcac ccgcactggc tccaacatcg actgtgagaa gttgcggcgt 180

cgcttctcct cgctgcattt catggtggag gtgaagggcg acctgactgc caagaaaatg 240

gtgctggctt tgctggagct ggcgcggcag gaccacggtg ctctggactg ctgcgtggtg 300

gtcattctct ctcacggctg tcaggccagc cacctgcagt tcccaggggc tgtctacggc 360

acagatggat gccctgtgtc ggtcgagaag attgtgaaca tcttcaatgg gaccagctgc 420

cccagcctgg gagggaagcc caagctcttt ttcatccagg cctgtggtgg ggagcagaaa 480

gaccatgggt ttgaggtggc ctccacttcc cctgaagacg agtcccctgg cagtaacccc 540

gagccagatg ccaccccgtt ccaggaaggt ttgaggacct tcgaccagct ggacgccata 600

tctagtttgc ccacacccag tgacatcttt gtgtcctact ctactttccc aggttttgtt 660

tcctggaggg accccaagag tggctcctgg tacgttgaga ccctggacga catctttgag 720

cagtgggctc actctgaaga cctgcagtcc ctcctgctta gggtcgctaa tgctgtttcg 780

gtgaaaggga tttataaaca gatgcctggt tgctttaatt tcctccggaa aaaacttttc 840

tttaaaacat cagctagcag agcc 864

<210> 1773
<211> 288
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1773
Val Asp Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn
1 5 10 15

Ala Asp Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu
20 25 30

Ile Ile Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg
35 40 45

Thr Gly Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser
50 55 60

```
Leu His Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met
65                  70                  75                  80

Val Leu Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp
                85                  90                  95

Cys Cys Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu
            100                 105                 110

Gln Phe Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val
        115                 120                 125

Glu Lys Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly
    130                 135                 140

Gly Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys
145                 150                 155                 160

Asp His Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro
                165                 170                 175

Gly Ser Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg
            180                 185                 190

Thr Phe Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp
        195                 200                 205

Ile Phe Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp
    210                 215                 220

Pro Lys Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu
225                 230                 235                 240

Gln Trp Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala
                245                 250                 255

Asn Ala Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe
            260                 265                 270

Asn Phe Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1774
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1774
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ccgcgg 6

<210> 1775
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1775
Pro Arg
1

<210> 1776
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1776
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1777
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1777
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1778
<211> 999
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1778
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggttt 999

<210> 1779
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1779
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
35 40 45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
180 185 190

Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
195 200 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
210 215 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225 230 235 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
245 250 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
260 265 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
275 280 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
290 295 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305 310 315 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
325 330

<210> 1780
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1780
tga 3

<210> 1781

<211> 163
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1781
agcgcagagg cttggggcag ccgagcggca gccaggcccc ggcccgggcc tcggttccag 60

aagggagagg agcccgccaa ggcgcgcaag agagcgggct gcctcgcagt ccgagccgga 120

gagggagcgc gagccgcgcc ggccccggac ggcctccgaa acc 163

<210> 1782
<211> 54
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1782
Ala Gln Arg Leu Gly Ala Ala Glu Arg Gln Pro Gly Pro Gly Pro Gly
1 5 10 15

Leu Gly Ser Arg Arg Glu Arg Ser Pro Pro Arg Arg Ala Arg Glu Arg
20 25 30

Ala Ala Ser Gln Ser Glu Pro Glu Arg Glu Arg Glu Pro Arg Arg Pro
35 40 45

Arg Thr Ala Ser Glu Thr
50

<210> 1783
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1783
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1784

<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1784
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1785
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1785
ggcgggcaat tg 12

<210> 1786
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1786
Gly Gly Gln Leu
1

<210> 1787
<211> 267

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1787
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1788
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1788
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1789
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1789
tcaggcggtg gctcaggtcc atgg 24

<210> 1790
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1790
Ser Gly Gly Gly Ser Gly Pro Trp
1   5

<210> 1791
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1791
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1792
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1792
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp

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1               5                   10                  15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
            20                  25                  30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
        35                  40                  45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
    50                  55                  60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65                  70                  75                  80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
                85                  90                  95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
            100                 105                 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
        115                 120                 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 1793
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1793
ggatctggac cgcgg 15

<210> 1794
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1794
Gly Ser Gly Pro Arg
1 5

<210> 1795
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1795
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1796
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1796
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1797
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1797
ccatgg 6

<210> 1798
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1798
Pro Trp
1

<210> 1799
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1799
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1800
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1800
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1801
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1801
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1802
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1802
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1803
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1803
ggcggaggaa gcggaggtgg gggc 24

<210> 1804
<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1804
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1805
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1805
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1806
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1806
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 1807
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1807
ggatcc 6

<210> 1808
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1808
Gly Ser
1

<210> 1809
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1809
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1810
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1810
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1811
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1811
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1812
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1812
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1813
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1813
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1814
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1814
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val

20 25 30

Cys Lys Cys Pro Arg
35

<210> 1815
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1815
gtcgac 6

<210> 1816
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1816
Val Asp
1

<210> 1817
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1817
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1818
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1818
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 1819
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1819
ggaacgcgtg gatcggga   18

<210> 1820
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1820
Gly Thr Arg Gly Ser Gly
1   5

<210> 1821
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1821
gctactaact tcagcctgct gaagcaggct ggagacgtgg aggagaaccc cgggcct 57

<210> 1822
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1822
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1823
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1823
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1824
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1824
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg

20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1825
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1825
gtcgag 6

<210> 1826
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1826
Val Glu
1

<210> 1827

<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1827
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1828
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1828
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1829
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1829
gtcgag 6

<210> 1830
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1830
Val Glu
1

<210> 1831
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1831
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctaa aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaaggtgga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1832
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1832
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1833
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1833
gtcgag 6

<210> 1834
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1834
Val Glu
1

<210> 1835
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1835
ggagtgcagg tggagactat ctccccagga gacgggcgca ccttccccaa gcgcggccag 60

acctgcgtgg tgcactacac cgggatgctt gaagatggaa agaaagttga ttcctcccgg 120

gacagaaaca agccctttaa gtttatgcta ggcaagcagg aggtgatccg aggctgggaa 180

gaaggggttg cccagatgag tgtgggtcag agagccaaac tgactatatc tccagattat 240

gcctatggtg ccactgggca cccaggcatc atcccaccac atgccactct cgtcttcgat 300

gtggagcttc taaaactgga a 321

<210> 1836
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1836
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp

20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1837
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1837
tga 3

<210> 1838
<211> 163
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1838
agcgcagagg cttggggcag ccgagcggca gccaggcccc ggcccgggcc tcggttccag 60

aagggagagg agcccgccaa ggcgcgcaag agagcgggct gcctcgcagt ccgagccgga 120

gagggagcgc gagccgcgcc ggccccggac ggcctccgaa acc 163

<210> 1839
<211> 54
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1839
Ala Gln Arg Leu Gly Ala Ala Glu Arg Gln Pro Gly Pro Gly Pro Gly
1 5 10 15

Leu Gly Ser Arg Arg Glu Arg Ser Pro Pro Arg Arg Ala Arg Glu Arg
            20   25   30

Ala Ala Ser Gln Ser Glu Pro Glu Arg Glu Arg Glu Pro Arg Arg Pro
        35   40   45

Arg Thr Ala Ser Glu Thr
    50

<210> 1840
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1840
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g   321

<210> 1841
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1841
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65   70   75   80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr

85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1842
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1842
ggcgggcaat tg 12

<210> 1843
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1843
Gly Gly Gln Leu
1

<210> 1844
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1844
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1845
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1845

Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1   5   10   15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
            20   25   30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
        35   40   45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
    50   55   60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65   70   75   80

Tyr His Val Phe Arg Arg Ile Ser Lys
                85

<210> 1846
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1846
tcaggcggtg gctcaggtcc atgg   24

<210> 1847
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1847
Ser Gly Gly Gly Ser Gly Pro Trp
1   5

<210> 1848
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1848
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc   60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag   120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc   180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1849
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1849
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

```
Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1850
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1850
ggatctggac cgcgg                                                    15


<210> 1851
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1851
Gly Ser Gly Pro Arg
1               5
```

<210> 1852
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1852
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1853
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1853
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1854
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1854
ccatgg 6

<210> 1855
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1855
Pro Trp
1

<210> 1856
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1856
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1857
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1857
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1858
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1858
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1859
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1859
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

```
His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
        35                  40                  45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50                  55                  60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65                  70                  75                  80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
                85                  90                  95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
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<210> 1860
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1860
ggcggaggaa gcggaggtgg gggc 24

<210> 1861
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1861
```
Gly Gly Gly Ser Gly Gly Gly Gly
1               5
```

<210> 1862
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1862
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1863
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1863
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 1864
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1864
ggatcc 6

<210> 1865
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1865
Gly Ser
1

<210> 1866
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1866
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1867
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1867
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1868
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1868
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1869
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1869
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1870
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1870
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1871
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1871
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1872
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1872
gtcgac 6

<210> 1873
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1873
Val Asp
1

<210> 1874
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1874
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcg 335

<210> 1875
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1875
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 1876

<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1876
tga 3

<210> 1877
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1877
gaaatgtggc atgaagggtt ggaagaagct tcaaggctgt acttcggaga gaggaacgtg 60

aagggcatgt ttgaggttct tgaacctctg cacgccatga tggaacgggg accgcagaca 120

ctgaaagaaa cctcttttaa tcaggcctac ggcagagacc tgatggaggc ccaagaatgg 180

tgtagaaagt atatgaaatc cggtaacgtg aaagacctga ctcaggcctg ggacctttat 240

taccatgtgt tcaggcggat cagtaag 267

<210> 1878
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1878
Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr Phe Gly
1 5 10 15

Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu His Ala
20 25 30

Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe Asn Gln
35 40 45

Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg Lys Tyr
50 55 60

Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala Trp Asp Leu Tyr
65 70 75 80

Tyr His Val Phe Arg Arg Ile Ser Lys
85

<210> 1879
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1879
ggcgggcaat tg 12

<210> 1880
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1880
Gly Gly Gln Leu
1

<210> 1881
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1881
ggcgtgcaag tggaaactat aagcccggga gacggccgca catttcccaa gagaggccag 60

acctgcgtgg tgcactatac aggaatgctg gaggacggga agaaattcga tagctcccgg 120

gatcgaaata agcctttcaa attcatgctg ggcaagcaag aagtcatcag aggctgggaa 180

gaaggcgtcg cccagatgtc cgtgggtcag cgcgccaagc tgacaattag tccagattac 240

gcctatggcg caacaggcca tcccggcatc atccccccac atgccacact cgtctttgat 300

gtcgagctcc tgaaactgga g 321

<210> 1882
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1882
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1883
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1883
tcaggcggtg gctcaggtcc atgg 24

<210> 1884
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1884
Ser Gly Gly Gly Ser Gly Pro Trp
1 5

<210> 1885
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1885
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1886
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1886
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

```
Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1887
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1887
ggatctggac cgcgg                                                    15


<210> 1888
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1888
Gly Ser Gly Pro Arg
1               5
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<210> 1889
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1889
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1890
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1890
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1891
<211> 999
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1891
atgccaccac ctcgcctgct gttctttctg ctgttcctga cacctatgga ggtgcgacct 60

gaggaaccac tggtcgtgaa ggtcgaggaa ggcgacaatg ccgtgctgca gtgcctgaaa 120

ggcacttctg atgggccaac tcagcagctg acctggtcca gggagtctcc cctgaagcct 180

tttctgaaac tgagcctggg actgccagga ctgggaatcc acatgcgccc tctggctatc 240

tggctgttca tcttcaacgt gagccagcag atgggaggat tctacctgtg ccagccagga 300

ccaccatccg agaaggcctg gcagcctgga tggaccgtca acgtggaggg gtctggagaa 360

ctgtttaggt ggaatgtgag tgacctggga ggactgggat gtgggctgaa gaaccgctcc 420

tctgaaggcc caagttcacc ctcagggaag ctgatgagcc caaaactgta cgtgtgggcc 480

aaagatcggc ccgagatctg ggagggagaa cctccatgcc tgccacctag agacagcctg 540

aatcagagtc tgtcacagga tctgacaatg gcccccgggt ccactctgtg gctgtcttgt 600

ggagtcccac ccgacagcgt gtccagaggc cctctgtcct ggacccacgt gcatcctaag 660

gggccaaaaa gtctgctgtc actggaactg aaggacgatc ggcctgccag agacatgtgg 720

gtcatggaga ctggactgct gctgccacga gcaaccgcac aggatgctgg aaaatactat 780

tgccaccggg gcaatctgac aatgtccttc catctggaga tcactgcaag gcccgtgctg 840

tggcactggc tgctgcgaac cggaggatgg aaggtcagtg ctgtgacact ggcatatctg 900

atcttttgcc tgtgctccct ggtgggcatt ctgcatctgc agagagccct ggtgctgcgg 960

agaaagagaa agagaatgac tgacccaaca agaaggttt 999

<210> 1892
<211> 333
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1892
Met Pro Pro Pro Arg Leu Leu Phe Phe Leu Leu Phe Leu Thr Pro Met
1 5 10 15

Glu Val Arg Pro Glu Glu Pro Leu Val Val Lys Val Glu Glu Gly Asp
20 25 30

Asn Ala Val Leu Gln Cys Leu Lys Gly Thr Ser Asp Gly Pro Thr Gln
35 40 45

Gln Leu Thr Trp Ser Arg Glu Ser Pro Leu Lys Pro Phe Leu Lys Leu
50 55 60

Ser Leu Gly Leu Pro Gly Leu Gly Ile His Met Arg Pro Leu Ala Ile
65 70 75 80

Trp Leu Phe Ile Phe Asn Val Ser Gln Gln Met Gly Gly Phe Tyr Leu
85 90 95

Cys Gln Pro Gly Pro Pro Ser Glu Lys Ala Trp Gln Pro Gly Trp Thr
100 105 110

Val Asn Val Glu Gly Ser Gly Glu Leu Phe Arg Trp Asn Val Ser Asp
115 120 125

Leu Gly Gly Leu Gly Cys Gly Leu Lys Asn Arg Ser Ser Glu Gly Pro
130 135 140

Ser Ser Pro Ser Gly Lys Leu Met Ser Pro Lys Leu Tyr Val Trp Ala
145 150 155 160

Lys Asp Arg Pro Glu Ile Trp Glu Gly Glu Pro Pro Cys Leu Pro Pro
165 170 175

Arg Asp Ser Leu Asn Gln Ser Leu Ser Gln Asp Leu Thr Met Ala Pro
180 185 190

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Gly Ser Thr Leu Trp Leu Ser Cys Gly Val Pro Pro Asp Ser Val Ser
        195                 200                 205

Arg Gly Pro Leu Ser Trp Thr His Val His Pro Lys Gly Pro Lys Ser
    210                 215                 220

Leu Leu Ser Leu Glu Leu Lys Asp Asp Arg Pro Ala Arg Asp Met Trp
225                 230                 235                 240

Val Met Glu Thr Gly Leu Leu Leu Pro Arg Ala Thr Ala Gln Asp Ala
                245                 250                 255

Gly Lys Tyr Tyr Cys His Arg Gly Asn Leu Thr Met Ser Phe His Leu
            260                 265                 270

Glu Ile Thr Ala Arg Pro Val Leu Trp His Trp Leu Leu Arg Thr Gly
        275                 280                 285

Gly Trp Lys Val Ser Ala Val Thr Leu Ala Tyr Leu Ile Phe Cys Leu
    290                 295                 300

Cys Ser Leu Val Gly Ile Leu His Leu Gln Arg Ala Leu Val Leu Arg
305                 310                 315                 320

Arg Lys Arg Lys Arg Met Thr Asp Pro Thr Arg Arg Phe
                325                 330
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<210> 1893
<211> 3
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1893
tga 3

<210> 1894
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1894
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1895
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1895
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 1896
<211> 6
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1896
gtcgag 6

<210> 1897
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1897
Val Glu
1

<210> 1898
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1898
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1899
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1899
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
    50   55   60

<210> 1900
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1900
gtcgag   6

<210> 1901
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1901
Val Glu
1

<210> 1902
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1902
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa   60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga   120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag   180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac   240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac   300

gtcgaactgt tgaagctcga a   321

<210> 1903
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 1903
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro

1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1904
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1904
gtcgag 6

<210> 1905
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1905
Val Glu
1

<210> 1906
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1906
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 1907
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1907
Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 1908
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1908
ggctcaggt 9

<210> 1909
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1909

Gly Ser Gly
1

<210> 1910
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1910
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1911
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1911
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1912
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1912
ccatgg 6

<210> 1913
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1913
Pro Trp
1

<210> 1914
<211> 63
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1914
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1915
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1915
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1916
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1916
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1917
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1917
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
            20   25   30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
        35   40   45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50   55   60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65   70   75   80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
                85   90   95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1918
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1918
ggcggaggaa gcggaggtgg gggc   24

<210> 1919
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1919
Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 1920
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 1920
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc   60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc   120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1921
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1921
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 1922
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1922
ggatcc 6

<210> 1923
<211> 2
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1923
Gly Ser
1

<210> 1924
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1924
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1925
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1925
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1926
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1926
cccgccccaa gacccccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 1927
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1927
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 1928
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1928
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 1929
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1929
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 1930
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1930
gtcgac 6

<210> 1931
<211> 2
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1931
Val Asp
1

<210> 1932
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1932
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1933
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1933
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg

100 105 110

<210> 1934
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1934
atgctcgagc aattggag 18

<210> 1935
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1935
Met Leu Glu Gln Leu Glu
1 5

<210> 1936
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1936
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 1937
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1937
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1938
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1938
tcaggcggtg gctcaggtgt ggac 24

<210> 1939
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1939
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 1940
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1940
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1941
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1941
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

```
Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 1942
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1942
ggatctggac cgcgg                                                    15


<210> 1943
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1943
Gly Ser Gly Pro Arg
1               5
```

<210> 1944
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1944
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1945
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1945
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1946
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1946
ccacgg 6

<210> 1947
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1947
Pro Arg
1

<210> 1948
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1948
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 1949
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1949
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 1950
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1950
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 1951
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1951
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 1952
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1952
ggcggaggaa gcggaggtgg gggc 24

<210> 1953
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1953
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 1954
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1954
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 1955
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1955
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 1956
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1956
ggatcc 6

<210> 1957
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 1957
Gly Ser
1

<210> 1958
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1958
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 1959
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1959
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 1960
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1960
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 1961
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1961
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 1962
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1962
ggttccgga   9

<210> 1963
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1963
Gly Ser Gly
1

<210> 1964
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1964
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1965
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1965
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1966
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1966
ggatctgga 9

<210> 1967
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1967
Gly Ser Gly
1

<210> 1968
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1968
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 1969
<211> 19
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1969
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 1970
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1970
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 1971
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1971
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
    50   55   60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65   70   75   80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
                85   90   95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
            100   105   110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
        115   120   125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
    130   135   140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145   150   155   160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
                165   170

<210> 1972
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 1972
gtcgag   6

<210> 1973
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 1973
Val Glu
1

<210> 1974
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 1974
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 1975
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1975
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 1976
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1976
gtcgag 6

<210> 1977
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1977
Val Glu
1

<210> 1978

<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1978
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 1979
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1979
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1980
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1980
gtcgag 6

<210> 1981
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1981
Val Glu
1

<210> 1982
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1982
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 1983
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 1983
Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 1984
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1984
tcaggcggtg gctcaggtcc gcggtga 27

<210> 1985
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1985
Ser Gly Gly Gly Ser Gly Pro Arg
1 5

<210> 1986
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1986
atgctcgagc aattggag 18

<210> 1987
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1987
Met Leu Glu Gln Leu Glu
1 5

<210> 1988

<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 1988
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 1989
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1989
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 1990
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1990
tcaggcggtg gctcaggtgt ggac 24

<210> 1991
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1991
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 1992
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 1992
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 1993
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 1993
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 1994
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1994
ggatctggac cgcgg 15

<210> 1995
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1995
Gly Ser Gly Pro Arg
1 5

<210> 1996
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 1996
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 1997
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 1997
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 1998
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 1998
gcatgcgcca cc 12

<210> 1999
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 1999
Ala Cys Ala Thr
1

<210> 2000
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2000
atggagtttg ggttgtcatg gttgtttctc gtcgctattc tcaaaggtgt acaatgctcc 60

cgc 63

<210> 2001
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2001
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2002
<211> 357
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2002
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct actttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 2003
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2003
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Asp Phe Ser Leu Glu Thr Ser Ala Asn Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 2004
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2004
ggcggtggag gctccggtgg aggcggctct ggaggaggag gttca 45

<210> 2005
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2005
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 2006
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2006
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 2007
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2007
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2008
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2008
atgcat 6

<210> 2009
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2009
Met His
1

<210> 2010
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2010
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2011
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 2011
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2012
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2012
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2013
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2013
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2014
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2014
atgctcgagc aattggag 18

<210> 2015
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2015
Met Leu Glu Gln Leu Glu
1 5

<210> 2016
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2016
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2017
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2017
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2018
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2018
tcaggcggtg gctcaggtgt ggac 24

<210> 2019
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2019
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 2020
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2020
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 2021
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2021
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

```
Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 2022
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2022
ggatctggac cgcgg                                                    15


<210> 2023
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2023
Gly Ser Gly Pro Arg
1               5
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<210> 2024
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2024
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2025
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2025
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2026
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2026
ccatgg 6

<210> 2027
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2027
Pro Trp
1

<210> 2028
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2028
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 2029
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2029
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2030
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2030
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 2031
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2031
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

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His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
        35                  40                  45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50                  55                  60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65                  70                  75                  80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
                85                  90                  95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
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<210> 2032
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2032
ggcggaggaa gcggaggtgg gggc 24

<210> 2033
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2033
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Gly Gly Gly Ser Gly Gly Gly Gly
1               5
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<210> 2034
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2034
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 2035
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2035
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2036
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2036
ggatcc 6

<210> 2037
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2037
Gly Ser
1

<210> 2038
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2038
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2039
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2039
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2040
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2040
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 2041
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2041
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 2042
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2042
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 2043
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2043
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 2044
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2044
gtcgac 6

<210> 2045
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2045
Val Asp
1

<210> 2046
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2046
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2047
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2047
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2048

<211> 276
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2048
atgcaattgg aaatgtggca tgaagggttg gaagaagctt caaggctgta cttcggagag 60

aggaacgtga agggcatgtt tgaggttctt gaacctctgc acgccatgat ggaacgggga 120

ccgcagacac tgaaagaaac ctcttttaat caggcctacg gcagagacct gatggaggcc 180

caagaatggt gtagaaagta tatgaaatcc ggtaacgtga aagacctgct ccaggcctgg 240

gacctttatt accatgtgtt caggcggatc agtaag 276

<210> 2049
<211> 92
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2049
Met Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu
1 5 10 15

Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro
20 25 30

Leu His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser
35 40 45

Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys
50 55 60

Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp
65 70 75 80

Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 2050
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2050
tcaggcggtg gcagcggcca attg 24

<210> 2051
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2051
Ser Gly Gly Gly Ser Gly Gln Leu
1 5

<210> 2052
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2052
ggagtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 2053
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2053
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2054
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2054
ggaagcatgc ggatcgga 18

<210> 2055
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2055
Gly Ser Met Arg Ile Gly
1 5

<210> 2056
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2056
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 2057
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2057
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2058
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2058
gtcgag 6

<210> 2059
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2059
Val Glu
1

<210> 2060
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2060
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2061
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2061
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 2062
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2062
ggcagtgggc cgcgg 15

<210> 2063
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2063
Gly Ser Gly Pro Arg
1 5

<210> 2064
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2064
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2065
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2065
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2066
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2066
ccatgg 6

<210> 2067
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2067
Pro Trp
1

<210> 2068
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2068
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 2069
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2069
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2070
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2070
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 2071
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2071
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2072
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2072
ggcggaggaa gcggaggtgg gggc 24

<210> 2073
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2073

Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 2074
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2074
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc   336

<210> 2075
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 2075
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
            20   25   30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
    50   55   60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            100   105   110

<210> 2076
<211> 6

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2076
ggatcc 6

<210> 2077
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2077
Gly Ser
1

<210> 2078
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2078
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2079
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2079
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2080
<211> 126
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2080
cccgccccaa gacccccac acctgcgccg accattgctt ctcaacccct gagtttgaga 60

cccgaggcct gccggccagc tgccggcggg gccgtgcata caagaggact cgatttcgct 120

tgcgac 126

<210> 2081
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2081
Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
1 5 10 15

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
20 25 30

His Thr Arg Gly Leu Asp Phe Ala Cys Asp
35 40

<210> 2082
<211> 111
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2082
atctatatct gggcacctct cgctggcacc tgtggagtcc ttctgctcag cctggttatt 60

actctgtact gtaatcaccg gaatcgccgc cgcgtttgta agtgtcccag g 111

<210> 2083
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2083
Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
1 5 10 15

Ser Leu Val Ile Thr Leu Tyr Cys Asn His Arg Asn Arg Arg Arg Val
20 25 30

Cys Lys Cys Pro Arg
35

<210> 2084
<211> 6

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2084
gtcgac 6

<210> 2085
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2085
Val Asp
1

<210> 2086
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2086
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2087
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2087
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2088
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2088
atgcatatgc tggag 15

<210> 2089
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2089
Met His Met Leu Glu
1 5

<210> 2090
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2090
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2091
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2091
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2092
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2092
tcaggcggtg gctcaggtgt ggac 24

<210> 2093
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2093

Ser Gly Gly Gly Ser Gly Val Asp
1   5

<210> 2094
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2094
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc   858

<210> 2095
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 2095
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1   5   10   15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
            20   25   30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
        35   40   45

```
Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
    50                  55                  60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65                  70                  75                  80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
                85                  90                  95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
            100                 105                 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
        115                 120                 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
    130                 135                 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145                 150                 155                 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
                165                 170                 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
            180                 185                 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285


<210> 2096
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"
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<400> 2096
agcggccgca ggtagcggg 19

<210> 2097
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2097
Ala Ala Ala Gly Ser Gly
1 5

<210> 2098
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2098
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 2099
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2099
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2100
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2100
gtcgag 6

<210> 2101
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2101
Val Glu
1

<210> 2102
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2102
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2103
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2103
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 2104
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2104
gcggccgcag gtagcggg 18

<210> 2105
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2105
Ala Ala Ala Gly Ser Gly

1 5

<210> 2106
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2106
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 2107
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2107
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 2108
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2108
gtcgag 6

<210> 2109
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2109
Val Glu
1

<210> 2110
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2110
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 2111
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2111
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2112
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2112
gtcgag 6

<210> 2113
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2113
Val Glu
1

<210> 2114
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2114
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 2115
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2115
Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp

65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 2116

<400> 2116
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<210> 2117

<400> 2117
000

<210> 2118
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2118
ggatctggac cgcgg 15

<210> 2119
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2119
Gly Ser Gly Pro Arg
1 5

<210> 2120
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2120
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2121
<211> 18
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2121
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2122
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2122
gcatgcgcca cc 12

<210> 2123
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2123
Ala Cys Ala Thr
1

<210> 2124
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2124
atggagtttg ggttgtcatg gttgtttctc gtcgctattc tcaaaggtgt acaatgctcc 60

cgc 63

<210> 2125
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2125

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Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1               5                   10                  15


Val Gln Cys Ser Arg
            20


<210> 2126
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2126
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata       60

tcttgtaaag cctccggtta ccctttacg aactatggaa tgaactgggt caaacaagcc      120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc      180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac      240

cttcagatta acaatcttaa aagcgaggat atggcaacct actttgcgc aagatgggaa       300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc         357


<210> 2127
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 2127
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1               5                   10                  15


Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
            20                  25                  30


Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
        35                  40                  45


Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
    50                  55                  60


Lys Gly Arg Phe Asp Phe Ser Leu Glu Thr Ser Ala Asn Thr Ala Tyr
65                  70                  75                  80


Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
                85                  90                  95


Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
            100                 105                 110
```

Thr Thr Val Thr Val Ser Ser
        115

<210> 2128
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2128
ggcggtggag gctccggtgg aggcggctct ggaggaggag gttca   45

<210> 2129
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2129
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1   5   10   15

<210> 2130
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2130
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc   60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct   120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct   180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct   240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca   300

ggcactaagt tggaaatcaa ggctttg   327

<210> 2131
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 2131
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
            20   25   30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
    50   55   60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            100   105   110

<210> 2132
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2132
atgcat   6

<210> 2133
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2133
Met His
1

<210> 2134
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2134

gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2135
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2135
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2136
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2136
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2137
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2137
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2138
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2138
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 2139
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2139
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2140
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2140
gtcgag 6

<210> 2141
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2141
Val Glu
1

<210> 2142
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2142
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2143
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2143
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 2144
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2144
gtcgag 6

<210> 2145
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2145
Val Glu
1

<210> 2146
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2146
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 2147
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2147
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2148
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2148

gtcgag 6

<210> 2149
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2149
Val Glu
1

<210> 2150
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2150
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 2151
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2151
Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 2152
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2152
gcggccgcag gtagcggg 18

<210> 2153
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2153
Ala Ala Ala Gly Ser Gly
1 5

<210> 2154
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2154
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 2155
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2155
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 2156

<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2156
ggatctgga 9

<210> 2157
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2157
Gly Ser Gly
1

<210> 2158
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2158
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2159
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2159
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2160
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2160
tcaggcggtg gctcaggtgt ggac 24

<210> 2161
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2161
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 2162
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2162
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 2163
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2163
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 2164
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2164
ggatctggac cgcgg 15

<210> 2165
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2165
Gly Ser Gly Pro Arg
1 5

<210> 2166
<211> 54

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2166
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2167
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2167
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2168
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2168
gcatgcgcca cc 12

<210> 2169
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2169
Ala Cys Ala Thr
1

<210> 2170
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2170
atggagtttg ggttgtcatg gttgtttctc gtcgctattc tcaaaggtgt acaatgctcc 60

cgc 63

<210> 2171
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2171
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2172
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2172
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct actttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 2173
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2173
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

```
Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
        35                  40                  45


Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
    50                  55                  60


Lys Gly Arg Phe Asp Phe Ser Leu Glu Thr Ser Ala Asn Thr Ala Tyr
65                  70                  75                  80


Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
                85                  90                  95


Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
            100                 105                 110


Thr Thr Val Thr Val Ser Ser
        115


<210> 2174
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2174
ggcggtggag gctccggtgg aggcggctct ggaggaggag gttca                       45


<210> 2175
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2175
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1               5                   10                  15


<210> 2176
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2176
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc        60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct       120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct       180
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cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 2177
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2177
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2178
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2178
atgcat 6

<210> 2179
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

peptide"

<400> 2179
Met His
1

<210> 2180
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2180
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2181
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2181
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2182
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2182
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2183
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2183
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 2184
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2184
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc   516

<210> 2185
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 2185
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2186
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2186
gtcgag 6

<210> 2187
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2187
Val Glu
1

<210> 2188
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2188
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2189
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2189
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 2190
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2190
gtcgag 6

<210> 2191
<211> 2

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2191
Val Glu
1

<210> 2192
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2192
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 2193
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2193
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr

85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2194
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2194
gtcgag 6

<210> 2195
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2195
Val Glu
1

<210> 2196
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2196
caattggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 2197
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2197

Gln Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1   5   10   15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
            20   25   30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
        35   40   45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
    50   55   60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65   70   75   80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
                85   90

<210> 2198
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2198
gcggccgcag gtagcggg   18

<210> 2199
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2199
Ala Ala Ala Gly Ser Gly
1   5

<210> 2200
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2200
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct   57

<210> 2201
<211> 19

<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2201
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 2202
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2202
atgcatatgc tggag 15

<210> 2203
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2203
Met His Met Leu Glu
1 5

<210> 2204
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2204
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2205
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2205
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2206
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2206
tcaggcggtg gctcaggtgt ggac 24

<210> 2207
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2207
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 2208
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2208
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 2209
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2209
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 2210
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2210
ggatctggac cgcgg 15

<210> 2211
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2211
Gly Ser Gly Pro Arg
1 5

<210> 2212
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2212
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2213
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2213
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2214
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2214
ccacgg 6

<210> 2215
<211> 2
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2215
Pro Arg
1

<210> 2216
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2216
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 2217
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2217
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2218
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2218
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 2219

<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2219
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2220
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2220
ggcggaggaa gcggaggtgg gggc 24

<210> 2221
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2221
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 2222
<211> 336

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2222
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 2223
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2223
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2224
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

oligonucleotide"

<400> 2224
ggatcc 6

<210> 2225
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2225
Gly Ser
1

<210> 2226
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2226
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2227
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2227
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2228
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2228
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2229
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2229
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2230
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2230
atgttggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 2231
<211> 91
<212> PRT

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2231
Met Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 2232
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2232
gtcgag 6

<210> 2233
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2233
Val Glu
1

<210> 2234
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 2234
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 2235
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2235
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2236
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2236
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 2237
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2237
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2238
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2238
gtcgag 6

<210> 2239
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2239
Val Glu
1

<210> 2240
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2240
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2241
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2241
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 2242
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2242
ggatctgga 9

<210> 2243
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2243
Gly Ser Gly
1

<210> 2244
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2244
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 2245
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2245
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 2246
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2246
atgcatatgc tggag 15

<210> 2247
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2247
Met His Met Leu Glu
1 5

<210> 2248
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2248
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2249
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2249
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2250
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2250
tcaggcggtg gctcaggtgt ggac 24

<210> 2251
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2251
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 2252
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2252
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 2253
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2253
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 2254
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2254
ggatctggac cgcgg 15

<210> 2255
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2255
Gly Ser Gly Pro Arg
1 5

<210> 2256
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2256
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2257
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2257
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2258
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2258
ccacgg 6

<210> 2259
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2259
Pro Arg
1

<210> 2260
<211> 63
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2260
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 2261
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2261
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2262
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2262
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 2263
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2263
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile

20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
85 90 95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 2264
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2264
ggcggaggaa gcggaggtgg gggc 24

<210> 2265
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2265
Gly Gly Gly Ser Gly Gly Gly Gly
1 5

<210> 2266
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2266
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc 60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc 120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 2267
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2267
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2268
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2268
ggatcc 6

<210> 2269
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2269
Gly Ser
1

<210> 2270
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2270
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2271
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2271
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2272
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2272
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2273
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2273
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1   5   10   15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
            20   25   30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
        35   40   45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
    50   55   60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65   70   75   80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
                85   90   95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
            100   105   110

<210> 2274
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2274
atgttggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag   273

<210> 2275
<211> 91
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

<400> 2275
Met Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1   5   10   15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
            20   25   30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 2276
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2276
gtcgag 6

<210> 2277
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2277
Val Glu
1

<210> 2278
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2278
ggcgtccaag tcgaaaccat tagtcccggc gatggcagaa catttcctac aaggggacaa 60

acatgtgtcg tccattatac aggcatgttg gaggacggca aaaagttcga cagtagtaga 120

gatcgcaata aacctttcaa attcatgttg ggaaaacaag aagtcattag gggatgggag 180

gagggcgtgg ctcaaatgtc cgtcggccaa cgcgctaagc tcaccatcag ccccgactac 240

gcatacggcg ctaccggaca tcccggaatt attccccctc acgctacctt ggtgtttgac 300

gtcgaactgt tgaagctcga a 321

<210> 2279
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2279
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65   70   75   80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
            100   105

<210> 2280
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2280
atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 2281
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2281
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2282
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2282
gtcgag 6

<210> 2283
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2283
Val Glu
1

<210> 2284
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2284
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2285
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2285
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
20 25 30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
35 40 45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
50 55 60

<210> 2286
<211> 9
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2286
ggatctgga 9

<210> 2287
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2287
Gly Ser Gly
1

<210> 2288
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2288
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct 57

<210> 2289
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2289
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1 5 10 15

Pro Gly Pro

<210> 2290
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2290
atgcatatgc tggag 15

<210> 2291
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2291
Met His Met Leu Glu
1 5

<210> 2292
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2292
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2293
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2293
Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1 5 10 15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
20 25 30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
35 40 45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
50 55 60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65 70 75 80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
85 90 95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2294
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2294
tcaggcggtg gctcaggtgt ggac 24

<210> 2295
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2295
Ser Gly Gly Gly Ser Gly Val Asp
1 5

<210> 2296
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2296
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc 60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 2297
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2297
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

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Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
        195                 200                 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
    210                 215                 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225                 230                 235                 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
                245                 250                 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
            260                 265                 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
        275                 280                 285
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<210> 2298
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2298
ggatctggac cgcgg 15

<210> 2299
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2299
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Gly Ser Gly Pro Arg
1               5
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<210> 2300
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2300
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2301
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2301
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1   5   10   15

Gly Pro

<210> 2302
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2302
gcatgcgcca cc 12

<210> 2303
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2303
Ala Cys Ala Thr
1

<210> 2304
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2304
atggagtttg ggttgtcatg gttgtttctc gtcgctattc tcaaaggtgt acaatgctcc 60

cgc 63

<210> 2305
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2305
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2306
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2306
gaagtccaat tgcaacagtc aggccccgaa ttgaaaaagc ccggcgaaac agtgaagata 60

tcttgtaaag cctccggtta ccctttacg aactatggaa tgaactgggt caaacaagcc 120

cctggacagg gattgaagtg gatgggatgg atcaatacat caacaggcga gtctaccttc 180

gcagatgatt tcaaaggtcg ctttgacttc tcactggaga ccagtgcaaa taccgcctac 240

cttcagatta acaatcttaa aagcgaggat atggcaacct acttttgcgc aagatgggaa 300

gtttatcacg ggtacgtgcc atactgggga caaggaacga cagtgacagt tagtagc 357

<210> 2307
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2307
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Asn Tyr
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Gln Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Ser Thr Gly Glu Ser Thr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Asp Phe Ser Leu Glu Thr Ser Ala Asn Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Ser Glu Asp Met Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Trp Glu Val Tyr His Gly Tyr Val Pro Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 2308
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2308
ggcggtggag gctccggtgg aggcggctct ggaggaggag gttca 45

<210> 2309
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2309
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 2310
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2310
gacatccaat tgacacaatc acacaaattt ctctcaactt ctgtaggaga cagagtgagc 60

ataacctgca aagcatccca ggacgtgtac aatgctgtgg cttggtacca acagaagcct 120

ggacaatccc caaaattgct gatttattct gcctctagta ggtacactgg ggtaccttct 180

cggtttacgg gctctgggtc cggaccagat ttcacgttca caatcagttc cgttcaagct 240

gaagacctcg ctgtttattt ttgccagcag cacttccgaa ccccttttac ttttggctca 300

ggcactaagt tggaaatcaa ggctttg 327

<210> 2311
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2311
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2312
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2312
atgcat 6

<210> 2313
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2313
Met His
1

<210> 2314
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2314
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2315
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2315
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2316
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2316
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2317
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2317
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2318
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2318
atgggcgtcc aagtcgaaac cattagtccc ggcgatggca gaacatttcc tacaagggga 60

caaacatgtg tcgtccatta tacaggcatg ttggaggacg gcaaaaagtt cgacagtagt 120

agagatcgca ataaaccttt caaattcatg ttgggaaaac aagaagtcat taggggatgg 180

gaggagggcg tggctcaaat gtccgtcggc caacgcgcta agctcaccat cagccccgac 240

tacgcatacg gcgctaccgg acatcccgga attattcccc ctcacgctac cttggtgttt 300

gacgtcgaac tgttgaagct cgaa 324

<210> 2319
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2319
Met Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe
1 5 10 15

Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu
20 25 30

Asp Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys
35 40 45

Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val
50 55 60

Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp
65 70 75 80

Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala
85 90 95

Thr Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
100 105

<210> 2320
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2320
ggatcaggcg gtggcagcgg ccaattg 27

<210> 2321
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2321
Gly Ser Gly Gly Gly Ser Gly Glu Leu
1 5

<210> 2322
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2322
atgttggaaa tgtggcatga agggttggaa gaagcttcaa ggctgtactt cggagagagg 60

aacgtgaagg gcatgtttga ggttcttgaa cctctgcacg ccatgatgga acggggaccg 120

cagacactga aagaaacctc ttttaatcag gcctacggca gagacctgat ggaggcccaa 180

gaatggtgta gaaagtatat gaaatccggt aacgtgaaag acctgctcca ggcctgggac 240

ctttattacc atgtgttcag gcggatcagt aag 273

<210> 2323
<211> 91
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2323
Met Leu Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg Leu Tyr
1 5 10 15

Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu Pro Leu
20 25 30

His Ala Met Met Glu Arg Gly Pro Gln Thr Leu Lys Glu Thr Ser Phe
35 40 45

Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp Cys Arg
50 55 60

Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala Trp Asp
65 70 75 80

Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 2324
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2324
ggcagtggag gcggg 15

<210> 2325
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2325
Gly Ser Gly Gly Gly Met
1 5

<210> 2326
<211> 516
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2326

atggctgcag gaggtcccgg cgcggggtct gcggccccgg tctcctccac atcctccctt 60

cccctggctg ctctcaacat gcgagtgcgg cgccgcctgt ctctgttctt gaacgtgcgg 120

acacaggtgg cggccgactg gaccgcgctg gcggaggaga tggactttga gtacttggag 180

atccggcaac tggagacaca agcggacccc actggcaggc tgctggacgc ctggcaggga 240

cgccctggcg cctctgtagg ccgactgctc gatctgctta ccaagctggg ccgcgacgac 300

gtgctgctgg agctgggacc cagcattgag gaggattgcc aaaagtatat cttgaagcag 360

cagcaggagg aggctgagaa gcctttacag gtggccgctg tagacagcag tgtcccacgg 420

acagcagagc tggcgggcat caccacactt gatgaccccc tggggcatat gcctgagcgt 480

ttcgatgcct tcatctgcta ttgccccagc gacatc 516

<210> 2327
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2327
Met Ala Ala Gly Gly Pro Gly Ala Gly Ser Ala Ala Pro Val Ser Ser
1 5 10 15

Thr Ser Ser Leu Pro Leu Ala Ala Leu Asn Met Arg Val Arg Arg Arg
20 25 30

Leu Ser Leu Phe Leu Asn Val Arg Thr Gln Val Ala Ala Asp Trp Thr
35 40 45

Ala Leu Ala Glu Glu Met Asp Phe Glu Tyr Leu Glu Ile Arg Gln Leu
50 55 60

Glu Thr Gln Ala Asp Pro Thr Gly Arg Leu Leu Asp Ala Trp Gln Gly
65 70 75 80

Arg Pro Gly Ala Ser Val Gly Arg Leu Leu Asp Leu Leu Thr Lys Leu
85 90 95

Gly Arg Asp Asp Val Leu Leu Glu Leu Gly Pro Ser Ile Glu Glu Asp
100 105 110

Cys Gln Lys Tyr Ile Leu Lys Gln Gln Gln Glu Glu Ala Glu Lys Pro
115 120 125

Leu Gln Val Ala Ala Val Asp Ser Ser Val Pro Arg Thr Ala Glu Leu
130 135 140

Ala Gly Ile Thr Thr Leu Asp Asp Pro Leu Gly His Met Pro Glu Arg
145 150 155 160

Phe Asp Ala Phe Ile Cys Tyr Cys Pro Ser Asp Ile
165 170

<210> 2328
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2328
gtcgag 6

<210> 2329
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2329
Val Glu
1

<210> 2330
<211> 186
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2330
aaaaaggtgg ccaagaagcc aaccaataag gccccccacc ccaagcagga gccccaggag 60

atcaattttc ccgacgatct tcctggctcc aacactgctg ctccagtgca ggagacttta 120

catggatgcc aaccggtcac ccaggaggat ggcaaagaga gtcgcatctc agtgcaggag 180

agacag 186

<210> 2331
<211> 62
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2331
Lys Lys Val Ala Lys Lys Pro Thr Asn Lys Ala Pro His Pro Lys Gln
1 5 10 15

Glu Pro Gln Glu Ile Asn Phe Pro Asp Asp Leu Pro Gly Ser Asn Thr
            20   25   30

Ala Ala Pro Val Gln Glu Thr Leu His Gly Cys Gln Pro Val Thr Gln
        35   40   45

Glu Asp Gly Lys Glu Ser Arg Ile Ser Val Gln Glu Arg Gln
    50   55   60

<210> 2332
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2332
ggatctgga   9

<210> 2333
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2333
Gly Ser Gly
1

<210> 2334
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2334
gcaacgaatt tttccctgct gaaacaggca ggggacgtag aggaaaatcc tggtcct   57

<210> 2335
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2335
Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val Glu Glu Asn
1   5   10   15

Pro Gly Pro

<210> 2336
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2336
atgcatatgc tggag 15

<210> 2337
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2337
Met His Met Leu Glu
1 5

<210> 2338
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2338
ggagtgcagg tggagactat tagccccgga gatggcagaa cattccccaa aagaggacag 60

acttgcgtcg tgcattatac tggaatgctg gaagacggca agaaggtgga cagcagccgg 120

gaccgaaaca agcccttcaa gttcatgctg gggaagcagg aagtgatccg gggctgggag 180

gaaggagtcg cacagatgtc agtgggacag agggccaaac tgactattag cccagactac 240

gcttatggag caaccggcca ccccgggatc attccccctc atgctacact ggtcttcgat 300

gtggagctgc tgaagctgga a 321

<210> 2339
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2339

Gly Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro
1   5   10   15

Lys Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp
            20   25   30

Gly Lys Lys Val Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe
        35   40   45

Met Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala
    50   55   60

Gln Met Ser Val Gly Gln Arg Ala Lys Leu Thr Ile Ser Pro Asp Tyr
65   70   75   80

Ala Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr
                85   90   95

Leu Val Phe Asp Val Glu Leu Leu Lys Leu Glu
            100   105

<210> 2340
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2340
tcaggcggtg gctcaggtgt ggac   24

<210> 2341
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2341
Ser Gly Gly Gly Ser Gly Val Asp
1   5

<210> 2342
<211> 858
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2342
ggatttggtg atgtcggtgc tcttgagagt ttgaggggaa atgcagattt ggcttacatc   60

ctgagcatgg agccctgtgg ccactgcctc attatcaaca atgtgaactt ctgccgtgag 120

tccgggctcc gcacccgcac tggctccaac atcgactgtg agaagttgcg gcgtcgcttc 180

tcctcgctgc atttcatggt ggaggtgaag ggcgacctga ctgccaagaa aatggtgctg 240

gctttgctgg agctggcgcg gcaggaccac ggtgctctgg actgctgcgt ggtggtcatt 300

ctctctcacg gctgtcaggc cagccacctg cagttcccag gggctgtcta cggcacagat 360

ggatgccctg tgtcggtcga gaagattgtg aacatcttca atgggaccag ctgccccagc 420

ctgggaggga agcccaagct ctttttcatc caggcctgtg gtggggagca gaaagatcat 480

gggtttgagg tggcctccac ttcccctgaa gacgagtccc ctggcagtaa ccccgagcca 540

gatgccaccc cgttccagga aggtttgagg accttcgacc agctggacgc catatctagt 600

ttgcccacac ccagtgacat ctttgtgtcc tactctactt tcccaggttt tgtttcctgg 660

agggacccca agagtggctc ctggtacgtt gagaccctgg acgacatctt tgagcagtgg 720

gctcactctg aagacctgca gtccctcctg cttagggtcg ctaatgctgt ttcggtgaaa 780

gggatttata aacagatgcc tggttgcttt aatttcctcc ggaaaaaact tttctttaaa 840

acatcagcta gcagagcc 858

<210> 2343
<211> 286
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2343
Gly Phe Gly Asp Val Gly Ala Leu Glu Ser Leu Arg Gly Asn Ala Asp
1 5 10 15

Leu Ala Tyr Ile Leu Ser Met Glu Pro Cys Gly His Cys Leu Ile Ile
20 25 30

Asn Asn Val Asn Phe Cys Arg Glu Ser Gly Leu Arg Thr Arg Thr Gly
35 40 45

Ser Asn Ile Asp Cys Glu Lys Leu Arg Arg Arg Phe Ser Ser Leu His
50 55 60

Phe Met Val Glu Val Lys Gly Asp Leu Thr Ala Lys Lys Met Val Leu
65 70 75 80

Ala Leu Leu Glu Leu Ala Arg Gln Asp His Gly Ala Leu Asp Cys Cys
85 90 95

Val Val Val Ile Leu Ser His Gly Cys Gln Ala Ser His Leu Gln Phe
100 105 110

Pro Gly Ala Val Tyr Gly Thr Asp Gly Cys Pro Val Ser Val Glu Lys
115 120 125

Ile Val Asn Ile Phe Asn Gly Thr Ser Cys Pro Ser Leu Gly Gly Lys
130 135 140

Pro Lys Leu Phe Phe Ile Gln Ala Cys Gly Gly Glu Gln Lys Asp His
145 150 155 160

Gly Phe Glu Val Ala Ser Thr Ser Pro Glu Asp Glu Ser Pro Gly Ser
165 170 175

Asn Pro Glu Pro Asp Ala Thr Pro Phe Gln Glu Gly Leu Arg Thr Phe
180 185 190

Asp Gln Leu Asp Ala Ile Ser Ser Leu Pro Thr Pro Ser Asp Ile Phe
195 200 205

Val Ser Tyr Ser Thr Phe Pro Gly Phe Val Ser Trp Arg Asp Pro Lys
210 215 220

Ser Gly Ser Trp Tyr Val Glu Thr Leu Asp Asp Ile Phe Glu Gln Trp
225 230 235 240

Ala His Ser Glu Asp Leu Gln Ser Leu Leu Leu Arg Val Ala Asn Ala
245 250 255

Val Ser Val Lys Gly Ile Tyr Lys Gln Met Pro Gly Cys Phe Asn Phe
260 265 270

Leu Arg Lys Lys Leu Phe Phe Lys Thr Ser Ala Ser Arg Ala
275 280 285

<210> 2344
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2344
ggatctggac cgcgg 15

<210> 2345
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2345

Gly Ser Gly Pro Arg
1 5

<210> 2346
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2346
gaaggccgag ggagcctgct gacatgtggc gatgtggagg aaaacccagg acca 54

<210> 2347
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2347
Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu Glu Asn Pro
1 5 10 15

Gly Pro

<210> 2348
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2348
ccacgg 6

<210> 2349
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2349
Pro Arg
1

<210> 2350
<211> 63
<212> DNA

<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 2350
atggagtttg gactttcttg gttgtttttg gtggcaattc tgaagggtgt ccagtgtagc 60

agg 63

<210> 2351
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2351
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1 5 10 15

Val Gln Cys Ser Arg
20

<210> 2352
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 2352
gacatccaac tgacgcaaag cccatctaca ctcagcgcta gcatggggga cagggtcaca 60

atcacgtgct ctgcctcaag ttccgttagg tttatccatt ggtatcagca gaaacctgga 120

aaggccccaa aaagactgat ctatgatacc agcaagctgg cttccggagt gccctcaagg 180

ttctcaggat ctggcagtgg gaccgatttc accctgacaa ttagcagcct tcagccagag 240

gatttcgcaa cctattactg tcagcaatgg gggtccagcc cattcacttt cggccaagga 300

acaaaggtgg agataaaa 318

<210> 2353
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2353
Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Met Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Arg Phe Ile
            20   25   30

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile Tyr
        35   40   45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50   55   60

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65   70   75   80

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Gly Ser Ser Pro Phe Thr
                85   90   95

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 2354
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      oligonucleotide"

<400> 2354
ggcggaggaa gcggaggtgg gggc   24

<210> 2355
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      peptide"

<400> 2355
Gly Gly Gly Ser Gly Gly Gly Gly
1   5

<210> 2356
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"

<400> 2356
gaggtgcagc tcgtggagta tggcgggggc ctggtgcagc ctgggggtag tctgaggctc   60

tcctgcgctg cctctggctt taacattaaa gactactaca tacattgggt gcggcaggcc   120

ccaggcaaag ggctcgaatg ggtggcctgg attgaccctg agaatggtga cactgagttt 180

gtccccaagt ttcagggcag agccaccatg agcgctgaca caagcaaaaa cactgcttat 240

ctccaaatga atagcctgcg agctgaagat acagcagtct attactgcaa gacgggagga 300

ttctggggcc agggaactct ggtgacagtt agttcc 336

<210> 2357
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2357
Glu Val Gln Leu Val Glu Tyr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Phe Val Pro Lys Phe
50 55 60

Gln Gly Arg Ala Thr Met Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Lys Thr Gly Gly Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105 110

<210> 2358
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2358
ggatcc 6

<210> 2359
<211> 2
<212> PRT
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2359
Gly Ser
1

<210> 2360
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 2360
gaacttccta ctcaggggac tttctcaaac gttagcacaa acgtaagt 48

<210> 2361
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 2361
Glu Leu Pro Thr Gln Gly Thr Phe Ser Asn Val Ser Thr Asn Val Ser
1 5 10 15

<210> 2362
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 2362
agagtgaagt tcagcaggag cgcagacgcc cccgcgtacc agcagggcca gaaccagctc 60

tataacgagc tcaatctagg acgaagagag gagtacgatg ttttggacaa gagacgtggc 120

cgggaccctg agatgggggg aaagccgaga aggaagaacc ctcaggaagg cctgtacaat 180

gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240

cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc 300

tacgacgccc ttcacatgca agctcttcca cctcgt 336

<210> 2363
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 2363
Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 2364
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 2364
Leu Glu His Asp
1