SEQUENCE LISTING

<110> DNATWOPOINTO INC.

<120> INTEGRATION OF NUCLEIC ACID CONSTRUCTS INTO EUKARYOTIC CELLS WITH A TRANSPOSASE FROM ORYZIAS

<130> 062195/546916

<150> 62/831,092
<151> 2019-04-08

<150> 62/873,338
<151> 2019-07-12

<150> 62/982,186
<151> 2020-02-27

<160> 909

<170> PatentIn version 3.5

<210> 1
<211> 420
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 1
ttaaccctcr tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccacacac tttgatgtga gcaagtagct 240

gtccagatcc gaaataaaca tgtctctttg atgcacttta ttttgattgc taaattattt 300

atattttgac tgtctctgaa tagaccttca gatcagagac ccaggtgtgt gtgggggagg 360

agctttctct cccttgtcct tgtcactgtt ctcgtgtcat ctctttgaga aacagcaaaa 420

<210> 2
<211> 266
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 2
agatactgaa tattgaaaat ctcagaaaat gtgacaagtt aaattacaaa aaaaaagtgt 60

ttgtgaagga aaaaaatatt aaatatagtg ttggaataaa aaaatagtat tgtttgtctc 120

tttcctaaat gttgaaatat tctaaaataa agttgatatc agtttaacct gttttttat 180

tgttttgagt ggatttacac agtatgggtc aaaatgaccc gcaacataat caaggtaatt 240

ttttttcaac ataataygag ggttaa 266

<210> 3
<211> 416
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 3
ccctcrtatt atgttaaggg tcaatttgac ccatttcagt ttttggtttg accaaagaac 60

tggttatcct ttctttttct tcacgaaagt tggtgacttt tcctcatcta gggtcatgaa 120

cttgtgtgta aaatctggat actgtgaagt gtcgtggaat gtctgtgaac agtttgtata 180

caaagatgat gttgcgggtc attttgaccc acacactttg atgtgagcaa gtagctgtcc 240

agatccgaaa taaacatgtc tctttgatgc actttatttt gattgctaaa ttatttatat 300

tttgactgtc tctgaataga ccttcagatc agagacccag gtgtgtgtgg gggaggagct 360

ttctctccct tgtccttgtc actgttctcg tgtcatctct ttgagaaaca gcaaaa 416

<210> 4
<211> 262
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 4
agatactgaa tattgaaaat ctcagaaaat gtgacaagtt aaattacaaa aaaaaagtgt 60

ttgtgaagga aaaaaatatt aaatatagtg ttggaataaa aaaatagtat tgtttgtctc 120

tttcctaaat gttgaaatat tctaaaataa agttgatatc agtttaacct gttttttat 180

tgttttgagt ggatttacac agtatgggtc aaaatgaccc gcaacataat caaggtaatt 240

ttttttcaac ataataygag gg 262

<210> 5
<211> 401
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 5
aagggtcaat ttgacccatt tcagtttttg gtttgaccaa agaactggtt atcctttctt 60

tttcttcacg aaagttggtg acttttcctc atctagggtc atgaacttgt gtgtaaaatc 120

tggatactgt gaagtgtcgt ggaatgtctg tgaacagttt gtatacaaag atgatgttgc 180

gggtcatttt gacccacaca ctttgatgtg agcaagtagc tgtccagatc cgaaataaac 240

atgtctcttt gatgcacttt attttgattg ctaaattatt tatattttga ctgtctctga 300

atagaccttc agatcagaga cccaggtgtg tgtgggggag gagctttctc tcccttgtcc 360

ttgtcactgt tctcgtgtca tctctttgag aaacagcaaa a 401

<210> 6
<211> 247
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 6
agatactgaa tattgaaaat ctcagaaaat gtgacaagtt aaattacaaa aaaaaagtgt 60

ttgtgaagga aaaaaatatt aaatatagtg ttggaataaa aaaatagtat tgtttgtctc 120

tttcctaaat gttgaaatat tctaaaataa agttgatatc agtttaacct gttttttat 180

tgttttgagt ggatttacac agtatgggtc aaaatgaccc gcaacataat caaggtaatt 240

tttttc 247

<210> 7
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 7
ccctcrtatt atgtt 15

<210> 8
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 8
aacataatay gaggg 15

<210> 9
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 9
ccctcatatt atgtt 15

<210> 10
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 10
aacataatac gaggg 15

<210> 11
<211> 265
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 11
aagggtcaat ttgacccatt tcagtttttg gtttgaccaa agaactggtt atcctttctt 60

tttcttcacg aaagttggtg acttttcctc atctagggtc atgaacttgt gtgtaaaatc 120

tggatactgt gaagtgtcgt ggaatgtctg tgaacagttt gtatacaaag atgatgttgc 180

gggtcatttt gacccacaca ctttgatgtg agcaagtagc tgtccagatc cgaaataaac 240

atgtctcttt gatgcacttt atttt 265

<210> 12
<211> 196
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 12
aagggtcaat ttgacccatt tcagtttttg gtttgaccaa agaactggtt atcctttctt 60

tttcttcacg aaagttggtg acttttcctc atctagggtc atgaacttgt gtgtaaaatc 120

tggatactgt gaagtgtcgt ggaatgtctg tgaacagttt gtatacaaag atgatgttgc 180

gggtcatttt gaccca 196

<210> 13
<211> 104
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 13
aaaataaagt tgatatcagt ttaacctgtt tttttattgt tttgagtgga tttacacagt 60

atgggtcaaa atgacccgca acataatcaa ggtaattttt tttc 104

<210> 14
<211> 76
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 14
ttttttttatt gttttgagtg gatttacaca gtatgggtca aaatgacccg caacataatc 60

aaggtaattt tttttc 76

<210> 15
<211> 44
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 15
atgggtcaaa atgacccgca acataatcaa ggtaattttt tttc 44

<210> 16
<211> 284
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 16
ttaaccctcr tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccacacac tttgatgtga gcaagtagct 240

gtccagatcc gaaataaaca tgtctctttg atgcacttta tttt 284

<210> 17
<211> 215
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 17
ttaaccctcr tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg accca 215

<210> 18
<211> 123
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 18
aaaataaagt tgatatcagt ttaacctgtt tttttattgt tttgagtgga tttacacagt 60

atgggtcaaa atgacccgca acataatcaa ggtaattttt tttcaacata ataygagggt 120

taa 123

<210> 19
<211> 95
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 19
ttttttttatt gttttgagtg gatttacaca gtatgggtca aaatgacccg caacataatc 60

aaggtaattt tttttcaaca taataygagg gttaa 95

<210> 20
<211> 63

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 20
atgggtcaaa atgacccgca acataatcaa ggtaattttt tttcaacata ataygagggt 60

taa 63

<210> 21
<211> 610
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 21

Met Asp Ile Ser Ser Asp Thr Pro Lys Pro Arg Thr Ser Ala Arg Lys
1 5 10 15

Arg Thr Pro Ala Gly Thr Phe Val Ser His Glu Glu Lys Ile Leu Asn
20 25 30

Trp Leu Glu Glu Glu Ser Asp Asp Gly Phe Ser Gly Ile Asp Asp Glu
35 40 45

Asp Gly Asp Pro Ser Phe Glu Pro Glu Ile Gln Arg Asp Glu Asp Asp
50 55 60

Ile Ile Ser Arg Glu Glu Asp Ser Glu Ser Ile Leu Glu Glu Gln Gln
65 70 75 80

Glu Pro Val Val Glu Val Glu Arg Gln Gln Ser Ser Asp Lys Ser Gln
85 90 95

Glu His Tyr Thr Gly Lys Asn Gly Phe Ile Trp Ser Ala Gln Glu Gly
100 105 110

```
Arg Arg Thr Ser Arg Val Ser Ala His Asn Ile Ile Arg Leu Pro Gly
        115                 120                 125

Arg Ile Ile Thr Lys Lys Phe Glu Gly Tyr Leu Glu Leu Trp Ser Lys
    130                 135                 140

Leu Ile Asp Pro Thr Met Leu Glu Ser Leu Val Arg Tyr Thr Asn Gln
145                 150                 155                 160

Lys Leu Ser Ser Tyr Arg Thr Lys Phe Lys Asn Asn Ser Met Ala Glu
                165                 170                 175

Leu Val Asp Thr Asn Val Asn Glu Met Arg Ala Phe Ile Gly Leu Met
            180                 185                 190

Tyr Tyr Ser Ser Val Phe Lys Cys Asn Asp Glu Asn Ile Asn Thr Ile
        195                 200                 205

Phe Ala Thr Asn Gly Thr Gly Arg Glu Ile Phe Arg Cys Val Met Ser
    210                 215                 220

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

Ile Thr Arg Gln Glu Arg Leu Lys Asp Asp Thr Leu Ala Pro Ile Ser
                245                 250                 255

Glu Ile Phe Asp Lys Phe Ile Ser Asn Ser Gln Ser Glu Tyr Thr Pro
            260                 265                 270

Gly Ala Tyr Leu Cys Ile Asp Glu Met Leu Val Pro Phe Arg Gly Arg
        275                 280                 285

Cys Lys Phe Ile Ile Tyr Met Pro Gln Lys Pro Ala Lys Tyr Gly Ile
    290                 295                 300

Lys Ile Leu Leu Leu Val Asp Ala Arg Thr Tyr Tyr Ile Tyr Asn Ala
305                 310                 315                 320
```

```
Tyr Ile Tyr His Gly Lys Tyr Ser Asp Gly Lys Gly Leu Thr Asp Gln
                325                 330                 335

Glu Lys Lys Met Ala Val Pro Thr Gln Ser Val Leu Arg Leu Ala Lys
            340                 345                 350

Val Val Glu Asn Ser Asn Arg Asn Ile Thr Ala Asp Asn Trp Phe Ser
        355                 360                 365

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

Gly Thr Leu Lys Lys Asn Lys Ala Glu Ile Pro Pro Cys Phe Leu Pro
385                 390                 395                 400

Asn Lys Asn Arg Leu Ala Glu Ser Ser Leu Tyr Gly Phe Thr Lys Asp
                405                 410                 415

Tyr Thr Leu Leu Ser Tyr Val Pro Lys Pro Asn Lys Ala Val Leu Leu
            420                 425                 430

Ile Ser Ser Ser His His Ile Gln Glu Ile Asp Lys Asp Thr Gly Lys
        435                 440                 445

Pro Ile Met Ile Ala Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Glu
    450                 455                 460

Val Asp Lys Lys Cys Ser Ile Tyr Cys Cys Ser Arg Lys Thr Arg Arg
465                 470                 475                 480

Trp Pro Met Ala Ile Phe Gln Arg Ile Leu Asp Met Ala Gly Ile Asn
                485                 490                 495

Ser Phe Val Leu Tyr Gln Ser Cys Asp Asp Ser Asp Gly Lys Met Arg
            500                 505                 510
```

```
Arg Gly Thr Phe Leu Leu Asn Met Ala Arg Asp Leu Val Leu Asp His
        515                 520                 525


Met Lys Asn Arg Val Tyr Asn Glu Arg Leu Pro Arg Glu Leu Arg Met
    530                 535                 540


Thr Leu Thr Arg Val Leu Gly Lys Asp Thr Pro Pro Ser Pro Pro Val
545                 550                 555                 560


Ala Arg Ser Val Pro Pro Ser Gly Lys Lys Leu Cys Tyr Ile Cys Pro
                565                 570                 575


Thr Lys Ile Lys Arg Gln Thr Lys Tyr Arg Cys Cys Asp Cys Ser Lys
            580                 585                 590


Pro Ile Cys Leu Gln Cys Ser Lys Pro Leu Cys Asp Asn Cys Gln Thr
        595                 600                 605


Lys Leu
    610
```

<210> 22
<211> 578
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 22

```
Met Pro Arg Gly Leu Lys Asp Ser Glu Ile Ile Gln Phe Leu Glu Glu
1               5                   10                  15


Glu Glu Glu Ala Ile Asp Ser Ala Ser Glu Asn Glu Gln Asp His Asp
            20                  25                  30


Val Ile Val Ser Asp His Val Thr Glu Ser Glu Gln Ser Glu Asn Glu
        35                  40                  45
```

```
Ser Asn Asp Gln Trp Arg Ser Glu Asp Glu Val Pro Leu Gln Asn Leu
    50                  55                  60

Ala Ser Ser Ser Gln Ser His Asp Gln Ser Phe Tyr Leu Gly Lys Asn
65                  70                  75                  80

Arg Leu Thr Lys Trp Tyr Lys His Pro Pro Arg Ser Met Val Arg Thr
                85                  90                  95

Gln Arg Ser Asn Ile Val Thr Glu Thr Ala Gly Pro Lys Gly Pro Ala
            100                 105                 110

Arg Asp Ile Met Thr Leu Ser Asp Ala Phe Leu Ser Ile Phe Ser Arg
        115                 120                 125

Glu Thr Val Asp Leu Ile Leu Thr Tyr Thr Asn Glu Tyr Ile Ile Ser
    130                 135                 140

Ile Gln Asn Asn Phe Gln Arg Glu Arg Asp Cys Lys Val Val Ser Tyr
145                 150                 155                 160

Glu Glu Leu Leu Ala Phe Phe Gly Leu Leu Tyr Met Ser Gly Val Leu
                165                 170                 175

Arg Ser Ser His Leu Asn Tyr Gln Asp Leu Trp Ala Ala Asp Gly Thr
            180                 185                 190

Gly Ile Glu Phe Phe Ser Asn Thr Met Ser Cys Lys Arg Phe Leu Phe
        195                 200                 205

Ile Leu Arg Ser Leu Arg Phe Asp Ser Arg Thr Thr Arg Glu Val Arg
    210                 215                 220

Gln Ser Leu Asp Lys Leu Ala Ala Ile Arg Asp Phe Cys Asn Leu Met
225                 230                 235                 240

Asn Asp Asn Phe Gln Lys Cys Tyr Ser Met Ser Glu Asn Val Thr Ile
                245                 250                 255
```

```
Asp Glu Gln Leu Pro Ala Phe Arg Gly Arg Phe Cys Gly Val Val Tyr
            260                 265                 270

Met Pro Ser Lys Pro Thr Lys Tyr Gly Ile Lys His Phe Ala Leu Val
        275                 280                 285

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

Gln Pro Asp Gly Pro Phe Lys Leu Pro Ser Asp Thr Lys Ser Leu Val
305                 310                 315                 320

Lys Arg Leu Ile Glu Pro Ile Ser Gly Thr Gly Arg Asn Val Thr Met
                325                 330                 335

Asp Asn Trp Phe Thr Ser Val Pro Leu Ala Lys Ser Leu Leu Asp Glu
            340                 345                 350

His Thr Leu Thr Met Val Gly Thr Leu Arg Lys Asn Lys Pro Glu Ile
        355                 360                 365

Pro Lys Cys Phe Leu Pro Glu Lys Lys Arg Glu Thr Thr Ser Ser Ile
    370                 375                 380

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

Arg Lys Ala Val Met Leu Leu Ser Thr Met His His Asp Asp Asn Val
                405                 410                 415

Glu Gly Glu Lys Arg Lys Pro Glu Ile Ile His Phe Tyr Asn Lys Thr
            420                 425                 430

Lys Gly Gly Val Asp Thr Asn Asp Gln Met Cys Ala Thr Tyr Asn Val
        435                 440                 445
```

```
Gly Arg Arg Thr Lys Arg Trp Pro Met Val Ile Phe Phe His Ile Phe
    450                 455                 460

Asn Ile Thr Gly Ile Asn Ser Tyr Val Ile Tyr Lys Ser Lys Ile Asp
465                 470                 475                 480

Ser Asn Ile Ser Arg Arg Leu Phe Leu Lys Leu Leu Ala Val Asp Leu
                485                 490                 495

Val Lys Pro His Gln Met Ser Arg Ala Ser Ile Pro Thr Leu Pro Arg
            500                 505                 510

Pro Leu Gln Lys Arg Leu Lys Arg Gln His Glu Ile Gln Asp Gln Val
        515                 520                 525

Ser Ile Pro Glu Ala Gly Arg Ser Gln Ser Tyr Lys Arg Cys His Val
    530                 535                 540

Cys Pro Arg Ser Lys Asp Arg Lys Thr Lys Thr Glu Cys Phe Lys Cys
545                 550                 555                 560

His Lys His Val Cys Asn Asp His Met Asn Ile Val Cys Lys Asn Cys
                565                 570                 575

Asn Asp
```

<210> 23
<211> 563
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 23

```
Met Ala Ser Ile Leu Thr Asp Glu Glu Ile Leu Ser Met Ile Asn Asn
1               5                   10                  15
```

```
Gly Asp Phe Leu Leu Ser Asp Glu Asp Phe Gly Leu Asn Ser Gly Ser
            20                  25                  30

Asp Ser Leu Gly Glu Gly Asp Ser Ala Asp Asp Asp Cys Asp Gln Asn
        35                  40                  45

Asn Ile Val Glu Gln Asn Ile Ala Asn Gln Ser Pro Ala Ser Leu Thr
    50                  55                  60

Glu Thr Asp Leu Ala Ser Pro Gln Ile Ser Arg Glu Asn Asn Tyr Asn
65                  70                  75                  80

Trp Ser Thr Cys Arg Pro Gln Val Ile Asp Ile Pro Phe Ser Glu Thr
                85                  90                  95

Pro Gly Leu Lys Ile Phe Pro Lys Gly Asn Asp Pro Ile Asp Tyr Phe
            100                 105                 110

Asn Leu Phe Val Thr Asn Thr Phe Trp Glu Phe Leu Val Glu Glu Ala
        115                 120                 125

Asn Ser Tyr Ala Val Glu Val Phe Leu Asn Ser Asp Arg Ser Asn Ser
    130                 135                 140

Arg Ile Ser Thr Trp Lys Asn Thr Asp Val Val Glu Met Lys Lys Phe
145                 150                 155                 160

Ile Ala Leu Leu Phe His Thr Gly Thr Ile Arg Val Asn Arg Leu Glu
                165                 170                 175

Asp Tyr Trp Lys Thr Asn Glu Leu Phe Asn Phe His Ile Phe Arg Ser
            180                 185                 190

Thr Met Ser Arg Asn Arg Phe Met Leu Leu Leu Arg Val Leu His Phe
        195                 200                 205

Cys Lys Asn Pro Gly Gln Asn Asp Asn Pro Thr Ser Arg Leu His Lys
    210                 215                 220
```

```
Ile Asp Lys Met Thr Asn Tyr Phe Asn Lys Thr Met Glu Glu Leu Tyr
225                 230                 235                 240

Gln Pro Ser Lys Asn Leu Ser Ile Asp Glu Ser Met Val Leu Phe Arg
                245                 250                 255

Gly Arg Leu Met Phe Arg Gln Tyr Ile Lys Asn Lys Arg His Lys Tyr
            260                 265                 270

Gly Ile Lys Leu Tyr Met Met Thr Glu Ser Trp Gly Leu Val His Arg
        275                 280                 285

Val Leu Ile Tyr Ser Gly Glu Gly Thr Gly Thr Ser Glu Glu Leu Ser
    290                 295                 300

His Thr Glu Tyr Val Val Glu Lys Leu Met Glu Gly Tyr Tyr Tyr Lys
305                 310                 315                 320

Gly His Ser Ile Tyr Met Asp Asn Tyr Tyr Asn Ser Val Lys Leu Ala
                325                 330                 335

His Tyr Leu Leu Glu Lys Gln Thr Tyr Cys Thr Gly Thr Leu Arg Ala
            340                 345                 350

Asn Arg Lys Asn Asn Pro Lys Ala Ile Asn Asp Lys Lys Leu Lys Lys
        355                 360                 365

Gly Glu Thr Ile Cys Gln Tyr Thr Glu Lys Gly Val Gly Val Val Lys
    370                 375                 380

Trp Lys Asp Arg Arg Asp Val Ile Ala Ile Ser Ser Glu His Ser His
385                 390                 395                 400

Asp Leu Val Asn Ile Thr Asn Arg Lys Gly Ile Ile Lys Ser Lys Pro
                405                 410                 415
```

```
Leu Ser Ile Ile Lys Tyr Asn Glu Tyr Met Ser Gly Ile Asp Arg Gln
            420                 425                 430

Asp Gln Met Leu Ser Tyr Tyr Pro Cys Glu Arg Lys Thr Leu Arg Trp
        435                 440                 445

Tyr Lys Lys Leu Gly Ile His Phe Ile Gln Ile Leu Leu Leu Asn Ser
    450                 455                 460

Tyr Leu Leu Tyr Asn Lys Asn Val Lys Lys Ile Ser Phe Tyr Asp Tyr
465                 470                 475                 480

Arg Leu Lys Ile Ile Ser Thr Ile Leu Asn Ser Gly Glu Asn Asn Ile
                485                 490                 495

Thr Lys Arg Gln Pro Thr Asn Asn Asn Ala Leu His Phe Ser Lys Lys
            500                 505                 510

Val Pro Lys Asn Lys Asn Asn Lys Ile Met Tyr Lys Arg Cys Lys Leu
        515                 520                 525

Cys Ser Ser Lys Gly Val Arg Lys Met Thr Ser Phe Tyr Cys Ser Met
    530                 535                 540

Cys Glu Asp Glu Pro Gly Phe Cys Leu Asp Cys Phe Glu Glu Phe His
545                 550                 555                 560

Arg Ser Ile
```

<210> 24
<211> 592
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 24

```
Met Ile Met Ser Asn Arg Lys Thr Val Arg Ala Thr Asp Pro Asn Phe
1               5                   10                  15

Glu Ser Gln Val Met Ala Trp Phe Glu Glu Ser Asn Glu Glu Leu Ser
            20                  25                  30

Ile Asp Gln Gly Asp Ser Asp Glu Lys Gln Trp Pro Asp Glu Asn Glu
        35                  40                  45

Asn Asp Val Ile Glu Asn His His Thr Ser Glu Glu Glu Glu Glu Glu
    50                  55                  60

Glu Glu Glu Glu Gly Glu Asp Phe Asp Lys Glu Asn Glu Glu Gln Pro
65                  70                  75                  80

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

Asn Cys Pro Val Asn Ser Arg Thr Arg Ser His Asn Ile Val Lys Ile
            100                 105                 110

Arg Val Pro Gly Pro Gln Ser Ser Ala Lys Asn Cys Lys Thr Gln Leu
        115                 120                 125

Glu Thr Leu Arg Cys Phe Leu Asp Glu Glu Ile Ile Thr Leu Ile Val
    130                 135                 140

Lys Tyr Thr Asn Ile Tyr Ile Asn Glu Val Lys Asp Lys Tyr Ser Arg
145                 150                 155                 160

Ala Arg Asp Ala Lys Leu Thr Asn Asn Glu Glu Val Leu Gly Leu Ile
                165                 170                 175

Gly Ile Leu Tyr Leu Ala Gly Leu Leu Gln Ser Gly Arg Gln His Ile
            180                 185                 190

Leu Gln Met Trp Asp Asn Ser Lys Gly Leu Gly Val Glu Ala Ile Tyr
        195                 200                 205
```

```
Leu Thr Met Gly Ile Asn Arg Phe Arg Phe Leu Met Arg Cys Leu Arg
    210                 215                 220

Phe Asp Asn Ile Ile Asp Arg Asn Glu Arg Lys Lys Thr Asp Asn Leu
225                 230                 235                 240

Ala Ala Ile Arg Lys Ile Phe Glu Met Phe Val Leu Lys Phe Lys Ser
                245                 250                 255

Met Phe Ile Pro Ser Gln Tyr Leu Thr Leu Asp Glu Gln Leu Ile Ala
            260                 265                 270

Phe Arg Gly Asn Cys Pro Phe Arg Thr Tyr Ile Pro Ser Lys Pro Ala
        275                 280                 285

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

Thr Cys Asn Leu Glu Ile Tyr Cys Gly Lys Gln Pro Ala Gly Pro His
305                 310                 315                 320

Ser Thr Ser Trp Lys Asn Tyr Asp Leu Val Met Arg Met Ile Ala His
                325                 330                 335

Ile Thr Gly Thr Gly Arg Asn Val Ser Met Asp Asn Trp Phe Thr Ser
            340                 345                 350

Val Pro Leu Ala Val Asp Leu Leu Gln Met Lys Thr Thr Ile Ile Gly
        355                 360                 365

Thr Leu Arg Lys Asn Lys Pro Asp Ile Pro Pro Gln Phe Ile Asn Ala
    370                 375                 380

Thr His Arg Glu Val Tyr Ser Ser Leu Phe Gly Phe His Lys Met Cys
385                 390                 395                 400
```

```
Thr Leu Val Ser Tyr Val Pro Lys Arg Lys Lys Val Val Leu Leu Leu
                405                 410                 415

Ser Thr Met His His Asp Cys Ala Ile Asp Asn Asp Thr Gly Asp Leu
            420                 425                 430

Lys Lys Pro Glu Ile Ile Thr Asp Tyr Asn Asn Thr Asn Tyr Gly Val
        435                 440                 445

Asp Met Leu Asp Lys Met Cys Ser His Tyr Asp Val Ser Arg Asn Ser
    450                 455                 460

Arg Arg Trp Pro Leu Thr Ile Phe Phe Asn Leu Leu Asn Ile Ala Ala
465                 470                 475                 480

Ile Asn Gly Met Cys Ile Tyr Lys Thr Lys Ser Ile Asn Lys Ile Asp
                485                 490                 495

Arg Lys Ser Asp Leu Gln Thr Ile Gly Tyr Glu Leu Ile Thr Pro Leu
            500                 505                 510

Leu Arg Lys Arg Leu Glu Ser Asp Asn Ile Ala Thr Asn Ile Lys Glu
        515                 520                 525

His Ile Arg Lys Leu Leu Asn Ile Glu Pro Glu Ile Leu Ala Glu Ile
    530                 535                 540

Gln Pro Asn Thr Ser Thr Val Gly Lys Cys Phe Tyr Cys Gly Arg Gln
545                 550                 555                 560

Lys Asn Lys Ser Thr Arg Lys His Cys Ser Lys Cys Gly Lys Trp Val
                565                 570                 575

Cys Pro Ala His Leu Arg His Ile Cys Pro Lys Cys Asn Glu Glu Asp
            580                 585                 590
```

<210> 25
<211> 565

<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 25

```
Met Ala Gly Gln Tyr Asn Leu Arg Pro Ile Ser Ala Leu Ala Glu Thr
1               5                  10                  15


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


Glu Asp His Ala Val Glu Phe Ser Gly Ser Glu Ser Glu Glu Asp Ala
        35                  40                  45


Asp Glu Ile Ser Glu Gln Pro Asp Glu Gly Asn Ser Arg Lys Arg Ser
    50                  55                  60


Asn Pro Ser Ile Ile His Gly Lys Asp Gly His Arg Trp Tyr Thr Thr
65                  70                  75                  80


Pro Gln Gln Arg Ser Gln Gly Arg Gln Asn Thr Pro Val Ser Tyr Leu
                85                  90                  95


Pro Gly Pro Val Gly Glu Ala Arg Arg Ala Ser Thr Pro Leu Gln Met
            100                 105                 110


Trp Ser Leu Leu Phe Pro Asp Ser Leu Ile Glu Lys Ile Val Arg His
        115                 120                 125


Thr Asn Glu Glu Ile Arg Arg Tyr Arg Asp Ser Leu Glu Ile Asp Asp
    130                 135                 140


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


Tyr Ile Gly Leu Leu Tyr Phe Ser Gly Leu Gln Lys Thr Ser His Thr
                165                 170                 175
```

```
Asn Leu Glu Asp Leu Trp Asn Pro Glu Tyr Gly Ser Ile Met Tyr Arg
            180                 185                 190

Ser Thr Met Ser Cys Asn Arg Phe Ser Val Ile Ser Arg Asn Leu Arg
        195                 200                 205

Phe Asp Asp Lys Thr Thr Arg Ala Glu Arg Arg Glu Thr Asp Lys Phe
    210                 215                 220

Ala Pro Ile Arg Glu Leu Trp Glu Gln Phe Ile Ser Asn Cys Thr Lys
225                 230                 235                 240

Tyr Tyr Asn Pro Thr Ser Tyr Cys Thr Ile Asp Glu Gln Leu Val Ser
                245                 250                 255

Phe Arg Gly Arg Cys Pro Phe Lys Val Tyr Asn Gly Ala Lys Pro Asp
            260                 265                 270

Lys Tyr Gly Ile Lys Ile Val Met Leu Asn Asp Ser Arg Thr Phe Tyr
        275                 280                 285

Met Phe Ser Ala Glu Pro Tyr Val Gly Arg Val Thr Thr Glu Lys Gly
    290                 295                 300

Glu Ser Val Pro Ser Tyr Tyr Ile Arg Lys Leu Ser Gln Pro Leu His
305                 310                 315                 320

Gly Thr Lys Arg Asn Ile Thr Cys Asp Asn Trp Phe Ser Ser Ile Pro
                325                 330                 335

Ile Phe Glu Lys Met Leu Thr Glu His Ser Ile Thr Met Val Gly Thr
            340                 345                 350

Leu Arg Lys Asn Lys Arg Glu Ile Pro Gly His Phe Arg Ser Ala Gly
        355                 360                 365
```

```
Pro Val Ser Ser Ser Lys Phe Ala Phe Asp Gly Arg Met Thr Leu Met
    370                 375                 380

Ala His Thr Pro Lys Gln Asn Lys Ile Val Ile Leu Leu Ser Thr Phe
385                 390                 395                 400

His Asp Cys Ala Thr Ile Asn Gln Glu Thr Gln Lys Met Glu Ile Ile
                405                 410                 415

His Phe Tyr Asn Thr Thr Lys Gly Gly Thr Asp Ser Phe Asp Gln Met
            420                 425                 430

Cys His Glu Tyr Ser Thr Ala Arg Lys Thr Leu Arg Trp Pro Met Arg
        435                 440                 445

Ile Trp Leu Ala Met Leu Asp Gln Gly Gly Ile Asn Ala Leu Ile Leu
    450                 455                 460

Tyr Asn Ser Asn Ala Asn Leu Glu Ala Phe Asn Arg Lys Thr Phe Leu
465                 470                 475                 480

Lys Asn Leu Ile Lys Ala Leu Val Glu Pro His Leu Arg Ala Arg Leu
                485                 490                 495

Gln Leu Pro Asn Phe Arg Arg Glu Leu Arg Phe Asn Ile His Thr Ile
            500                 505                 510

Leu Gly Gln Gly Glu Arg Pro Val Lys Arg Gly Gln Gln Lys Arg Ala
        515                 520                 525

Arg Cys Gly Leu Cys Pro Arg Ala Gln Asp Arg Lys Val Gln Met Tyr
    530                 535                 540

Cys Glu Met Cys His Arg Thr Val Cys Glu Asp His Arg Val Ile Phe
545                 550                 555                 560

Cys Cys Asp Cys Ala
                565
```

<210> 26
<211> 587
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 26

```
Met Glu Asp Ala Lys Lys Arg Lys Leu Thr Ser Asp Asp Pro Ser Val
1               5                   10                  15


Trp Leu Lys Trp Phe Glu Glu Met Ser Glu Glu Glu Asn Glu Lys Asp
            20                  25                  30


Glu Glu Ser Cys Ser Glu Ile Glu Ala Asp Ile Leu Glu Glu Ser Pro
        35                  40                  45


His Asp Thr Ala Ser Glu Gln Glu Ala Gly Asp Leu Glu Ser Asp Asn
    50                  55                  60


Asp Cys Asp Asp Ile Ser Asp Ser Glu Ser Glu Asn Phe Tyr Ile Gly
65                  70                  75                  80


Lys Asp Lys Phe Thr Lys Trp Cys Lys Val Lys Pro Arg Gln Asn Val
                85                  90                  95


Arg Thr Arg Ser Cys Asn Ile Ile Ile His Leu Pro Gly Pro Arg Arg
            100                 105                 110


Glu Ala His Gly Val Gln Lys Glu Ile Asp Ile Leu Lys Phe Phe Leu
        115                 120                 125


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


Gly Val Val Arg Glu Lys Tyr Cys Arg Ala Arg Asp Ala Ala Asp Thr
145                 150                 155                 160
```

```
Asp Val Thr Glu Ile Cys Ala Phe Ile Gly Leu Leu Tyr Leu Ile Gly
                165                 170                 175

Ser Leu Arg Cys Ser Arg Lys Asn Met His Asp Leu Trp Asp Asn Ser
            180                 185                 190

Arg Gly Asn Gly Leu Glu Ser Cys Tyr Leu Thr Met Ser Glu Asn Arg
        195                 200                 205

Phe Lys Phe Leu Leu Arg Cys Leu Arg Phe Asp Asp Ile Arg Asp Arg
    210                 215                 220

His Met Arg Lys Glu Val Asp Lys Leu Cys Ser Ile Arg Asp Leu His
225                 230                 235                 240

Glu Leu Leu Ile Asn Asn Phe Gln Arg Tyr Phe Cys Ala Ser Glu Tyr
                245                 250                 255

Leu Thr Val Asp Glu Gln Leu Leu Ala Phe Arg Gly Asn Cys Ser Phe
            260                 265                 270

Arg Gln Tyr Ile Pro Ser Lys Pro Ala Lys Tyr Gly Leu Lys Ile Phe
        275                 280                 285

Ala Leu Val Asp Cys Lys Thr Gly Tyr Thr Ile Asn Leu Glu Pro Tyr
    290                 295                 300

Val Gly Lys Gln Pro Glu Gly Pro Tyr Gln Val Gly Asn Ser Gly Glu
305                 310                 315                 320

Glu Ile Val Leu Arg Leu Cys Asn Pro Val Glu Gly Thr Asn Arg Asn
                325                 330                 335

Ile Thr Ala Asp Asn Trp Phe Thr Ser Val Thr Val Ser Glu Arg Leu
            340                 345                 350
```

```
Leu Leu Glu Lys Lys Leu Thr Tyr Val Gly Thr Met Arg Lys Asn Lys
        355                 360                 365

Arg Glu Ile Pro Lys Glu Phe Leu Pro Asn Lys Ser Ile Pro Ala Lys
    370                 375                 380

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

Leu Lys Lys Gly Lys Ser Val Ile Leu Leu Ser Ser Met His Phe Asp
                405                 410                 415

Asp Thr Ile Asp Val Ser Thr Gly Asp His Lys Lys Pro Glu Ile Val
            420                 425                 430

Thr Phe Tyr Asn Met Thr Lys Val Gly Val Asp Leu Val Asp Gln Leu
        435                 440                 445

Cys Gln Lys Tyr Asp Val Ser Arg Asn Thr Arg Arg Trp Pro Leu Val
    450                 455                 460

Met Phe Tyr Asn Leu Leu Asn Ile Ser Ala Ile Asn Ala Phe Val Ile
465                 470                 475                 480

Tyr Lys Ala Asn Thr Arg Glu Ser Thr Gln Ile Gln Arg Arg Ile Phe
                485                 490                 495

Leu Gln Asn Ile Ser Trp Glu Leu Ile Lys Pro Gln Ile Glu Arg Arg
            500                 505                 510

Thr Ala Val Leu Thr Ile Pro Lys Glu Ile Arg Arg Arg Ala Arg Val
        515                 520                 525

Leu Leu Gly Ile Glu Glu Ser Thr Val Pro Gln Lys Arg Pro Gly Thr
    530                 535                 540

Arg Gly Arg Cys Leu Pro Cys Gly Arg Gln Arg Asn Lys Thr Thr Arg
545                 550                 555                 560
```

```
Arg Trp Cys Cys Lys Cys Gln Ile Trp Ala Cys Gly Glu His Leu Thr
                565                 570                 575


Asp Ile Cys Leu Gln Cys Leu Glu Asn Thr Asn
            580                 585


<210>  27
<211>  564
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  27

Met Thr Arg Tyr Met Asn Tyr Asp Glu Glu Asn Glu Tyr Phe Arg His
1               5                   10                  15


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


Val Ala Ser Glu Asp Asp Glu Tyr Cys Ser Asn His Asp Ser Ser Ser
        35                  40                  45


Glu Ile Glu Thr Glu Thr Glu Asp Glu Ser Ser Leu Ser Ala Thr Asp
    50                  55                  60


Phe Tyr Ile Gly Lys Asp Lys Val Thr Lys Trp Leu Lys Lys Lys Tyr
65                  70                  75                  80


Ser Gln Ser Val Arg Lys Pro Ala Arg Asn Ile Ile Ser Lys Leu Pro
                85                  90                  95


Gly Asn Thr Ala Tyr Ser Lys His Val Ala Ser Pro Val Asp Ala Trp
            100                 105                 110


Asn Val Leu Phe Asp Ser Lys Met Leu Asn Met Met Val Glu Asn Thr
        115                 120                 125
```

```
Asn Ile Tyr Ile Glu Ser Ile Gln Glu Arg Phe Thr Arg Glu Arg Asp
    130                 135                 140

Ala Arg Lys Thr Asp Glu Thr Glu Ile Lys Ala Phe Ile Gly Leu Leu
145                 150                 155                 160

Tyr Leu Cys Gly Thr His Lys Ser Ser His Thr Asn Leu Lys Asp Leu
                165                 170                 175

Tyr Ala Thr Asp Gly Thr Gly Ile Asp Ile Phe Pro Lys Thr Met Ser
            180                 185                 190

Arg Thr Arg Phe Leu Phe Leu Met Arg Cys Leu Arg Phe Asp Asn Ile
        195                 200                 205

Asn Asp Arg Gln Ser Arg Arg Glu Ile Asp Lys Leu Ala Pro Ile Arg
    210                 215                 220

Asp Phe Phe Glu Thr Phe Val Thr Asn Cys Lys Asn Ala Tyr Thr Leu
225                 230                 235                 240

Gly Glu Phe Val Thr Ile Asp Glu Lys Leu Glu Pro Phe Arg Gly Arg
                245                 250                 255

Cys Gly Phe Arg Gln Tyr Met Pro Lys Lys Pro Ala Lys Tyr Gly Ile
            260                 265                 270

Lys Ile Phe Ala Leu Val Asp Ser Arg Val Phe Tyr Thr Trp Asn Met
        275                 280                 285

Glu Ile Tyr Ala Gly Gln Gln Pro Asp Gly Pro Phe Lys Ile Asp Cys
    290                 295                 300

Ser Ser Lys Ser Ile Val Met Arg Leu Met Thr Pro Leu Phe Asn Ser
305                 310                 315                 320
```

```
Gly Arg Asn Leu Thr Thr Asp Asn Trp Tyr Thr Gly Tyr Glu Leu Ala
                325                 330                 335

Gln Glu Leu Leu Lys Lys Lys Ile Thr Ile Val Gly Thr Leu Arg Gln
            340                 345                 350

Asn Lys Arg Glu Ile Pro Pro Gln Phe Leu Val Lys Lys Glu Leu Tyr
        355                 360                 365

Ser Ser Ile Phe Gly Phe Gln Lys Glu Thr Thr Met Val Ser Tyr Ser
    370                 375                 380

Ala Lys Lys Asn Lys Asn Val Val Met Leu Ser Thr Met His Thr Asp
385                 390                 395                 400

Asp Lys Ile Asp Glu Thr Thr Met Glu Leu Lys Lys Pro Asp Ile Ile
                405                 410                 415

Thr Phe Tyr Asn Leu Thr Lys Gly Ala Val Asp Val Val Asp Glu Met
            420                 425                 430

Ala Ala Ala Tyr Thr Thr Ala Arg Ile Ser Asn Arg Trp Pro Met Val
        435                 440                 445

Ile Leu Phe Ser Met Leu Asn Val Ala Ala Ile Asn Ala Arg Val Leu
    450                 455                 460

Leu Met Ser Thr Lys Asn Pro Pro Thr Gln Phe Arg Asn Arg Arg Phe
465                 470                 475                 480

Phe Leu Lys Thr Leu Gly Leu Val Leu Ser Glu Gln His Arg Lys Arg
                485                 490                 495

Lys Pro Leu Arg Lys Thr Thr Lys Pro Ser Thr Glu Glu Leu Glu Ile
            500                 505                 510

Thr Asn Ser Glu Pro Pro Ala Lys Lys Ile Lys Glu Thr Tyr Lys Arg
        515                 520                 525
```

Cys Ala Phe Cys Pro Cys Asn Lys Asp Arg Lys Ser Arg Phe Ile Cys
530 535 540

Gln Lys Cys Glu Lys Ser Leu Cys Val Glu His Gln Tyr Val Ile Cys
545 550 555 560

Gln Asn Cys Leu

<210> 28
<211> 628
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 28

Met Asp Leu Arg Lys Gln Asp Glu Lys Ile Arg Gln Trp Leu Glu Gln
1 5 10 15

Asp Ile Glu Glu Asp Ser Lys Gly Glu Ser Asp Asn Ser Ser Ser Glu
20 25 30

Thr Glu Asp Ile Val Glu Met Glu Val His Lys Asn Thr Ser Ser Glu
35 40 45

Ser Glu Val Ser Ser Glu Ser Asp Tyr Glu Pro Val Cys Pro Ser Lys
50 55 60

Arg Gln Arg Thr Gln Ile Ile Glu Ser Glu Glu Ser Asp Asn Ser Glu
65 70 75 80

Ser Ile Arg Pro Ser Arg Arg Gln Thr Ser Arg Val Ile Asp Ser Asp
85 90 95

Glu Thr Asp Glu Asp Val Met Ser Ser Thr Pro Gln Asn Ile Pro Arg
100 105 110

```
Asn Pro Asn Val Ile Gln Pro Ser Ser Arg Phe Leu Tyr Gly Lys Asn
        115                 120                 125

Lys His Lys Trp Ser Ser Ala Ala Lys Pro Ser Ser Val Arg Thr Ser
    130                 135                 140

Arg Arg Asn Ile Ile His Phe Ile Pro Gly Pro Lys Glu Arg Ala Arg
145                 150                 155                 160

Glu Val Ser Glu Pro Ile Asp Ile Phe Ser Leu Phe Ile Ser Glu Asp
                165                 170                 175

Met Leu Gln Gln Val Val Thr Phe Thr Asn Ala Glu Met Leu Ile Arg
            180                 185                 190

Lys Asn Lys Tyr Lys Thr Glu Thr Phe Thr Val Ser Pro Thr Asn Leu
        195                 200                 205

Glu Glu Ile Arg Ala Leu Leu Gly Leu Leu Phe Asn Ala Ala Ala Met
    210                 215                 220

Lys Ser Asn His Leu Pro Thr Arg Met Leu Phe Asn Thr His Arg Ser
225                 230                 235                 240

Gly Thr Ile Phe Lys Ala Cys Met Ser Ala Glu Arg Leu Asn Phe Leu
                245                 250                 255

Ile Lys Cys Leu Arg Phe Asp Asp Lys Leu Thr Arg Asn Val Arg Gln
            260                 265                 270

Arg Asp Asp Arg Phe Ala Pro Ile Arg Asp Leu Trp Gln Ala Leu Ile
        275                 280                 285

Ser Asn Phe Gln Lys Trp Tyr Thr Pro Gly Ser Tyr Ile Thr Val Asp
    290                 295                 300
```

```
Glu Gln Leu Val Gly Phe Arg Gly Arg Cys Ser Phe Arg Met Tyr Ile
305                 310                 315                 320

Pro Asn Lys Pro Asn Lys Tyr Gly Ile Lys Leu Val Met Ala Ala Asp
                325                 330                 335

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

Thr Asp Pro Gln Asn Gln Pro Leu Ala Thr Phe Phe Ile Lys Glu Ile
        355                 360                 365

Thr Ser Thr Leu His Gly Thr Asn Arg Asn Ile Thr Met Asp Asn Trp
    370                 375                 380

Phe Thr Ser Val Pro Leu Ala Asn Glu Leu Leu Met Ala Pro Tyr Asn
385                 390                 395                 400

Leu Thr Leu Val Gly Thr Leu Arg Ser Asn Lys Arg Glu Ile Pro Glu
                405                 410                 415

Lys Leu Lys Asn Ser Lys Ser Arg Ala Ile Gly Thr Ser Met Phe Cys
            420                 425                 430

Tyr Asp Gly Asp Lys Thr Leu Val Ser Tyr Lys Ala Lys Ser Asn Lys
        435                 440                 445

Val Val Phe Ile Leu Ser Thr Ile His Asp Gln Pro Asp Ile Asn Gln
    450                 455                 460

Glu Thr Gly Lys Pro Glu Met Ile His Phe Tyr Asn Ser Thr Lys Gly
465                 470                 475                 480

Ala Val Asp Thr Val Asp Gln Met Cys Ser Ser Ile Ser Thr Asn Arg
                485                 490                 495

Lys Thr Gln Arg Trp Pro Leu Cys Val Phe Tyr Asn Met Leu Asn Leu
            500                 505                 510
```

```
Ser Ile Ile Asn Ala Tyr Val Val Tyr Val Tyr Asn Asn Val Arg Asn
        515                 520                 525

Asn Lys Lys Pro Met Ser Arg Arg Asp Phe Val Ile Lys Leu Gly Asp
    530                 535                 540

Gln Leu Met Glu Pro Trp Leu Arg Gln Arg Leu Gln Thr Val Thr Leu
545                 550                 555                 560

Arg Arg Asp Ile Lys Val Met Ile Gln Asp Ile Leu Gly Glu Ser Ser
                565                 570                 575

Asp Leu Glu Ala Pro Val Pro Ser Val Ser Asn Val Arg Lys Ile Tyr
            580                 585                 590

Tyr Leu Cys Pro Ser Lys Ala Arg Arg Met Thr Lys His Arg Cys Ile
        595                 600                 605

Lys Cys Lys Gln Ala Ile Cys Gly Pro His Asn Ile Asp Ile Cys Ser
    610                 615                 620

Arg Cys Ile Glu
625
```

<210> 29
<211> 599
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 29

```
Met Ala Ser Arg Gln His Leu Tyr Gln Asp Glu Ile Ala Ala Ile Leu
1               5                   10                  15

Glu Asn Glu Asp Asp Tyr Ser Pro His Asp Thr Asp Ser Glu Met Glu
            20                  25                  30
```

```
Asp Cys Val Thr Gln Asp Asp Val Arg Ser Asp Val Glu Asp Glu Met
        35                  40                  45

Val Asp Asn Ile Gly Asn Gly Thr Ser Pro Ala Ser Arg His Glu Asp
    50                  55                  60

Pro Glu Thr Pro Asp Pro Ser Ser Glu Ala Ser Asn Leu Glu Val Thr
65                  70                  75                  80

Leu Ser Ser His Arg Ile Ile Ile Leu Pro Gln Arg Ser Ile Arg Glu
                85                  90                  95

Lys Asn Asn His Ile Trp Ser Thr Thr Lys Gly Gln Ser Ser Gly Arg
            100                 105                 110

Thr Ala Ala Ile Asn Ile Val Arg Thr Asn Arg Gly Pro Thr Arg Met
        115                 120                 125

Cys Arg Asn Ile Val Asp Pro Leu Leu Cys Phe Gln Leu Phe Ile Lys
    130                 135                 140

Glu Glu Ile Val Glu Glu Ile Val Lys Trp Thr Asn Val Glu Met Val
145                 150                 155                 160

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

Asn Glu Met Glu Ile Trp Ala Ile Ile Ser Met Leu Thr Leu Ser Ala
            180                 185                 190

Val Met Lys Asp Asn His Leu Ser Thr Asp Glu Leu Phe Asn Val Ser
        195                 200                 205

Tyr Gly Thr Arg Tyr Val Ser Val Met Ser Arg Glu Arg Phe Glu Phe
    210                 215                 220
```

```
Leu Leu Arg Leu Leu Arg Met Gly Asp Lys Leu Leu Arg Pro Asn Leu
225                 230                 235                 240

Arg Gln Glu Asp Ala Phe Thr Pro Val Arg Lys Ile Trp Glu Ile Phe
                245                 250                 255

Ile Asn Gln Cys Arg Leu Asn Tyr Val Pro Gly Thr Asn Leu Thr Val
            260                 265                 270

Asp Glu Gln Leu Leu Gly Phe Arg Gly Arg Cys Pro Phe Arg Met Tyr
        275                 280                 285

Ile Pro Asn Lys Pro Asp Lys Tyr Gly Ile Lys Phe Pro Met Val Cys
    290                 295                 300

Asp Ala Ala Thr Lys Tyr Met Val Asp Ala Ile Pro Tyr Leu Gly Lys
305                 310                 315                 320

Ser Thr Lys Thr Gln Gly Leu Pro Leu Gly Glu Phe Tyr Val Lys Glu
                325                 330                 335

Leu Thr Gln Thr Val His Gly Thr Asn Arg Asn Val Thr Cys Asp Asn
            340                 345                 350

Trp Phe Thr Ser Val Pro Leu Ala Lys Ser Leu Leu Asn Ser Pro Tyr
        355                 360                 365

Asn Leu Thr Leu Val Gly Thr Ile Arg Ser Asn Lys Arg Glu Ile Pro
    370                 375                 380

Glu Glu Val Lys Asn Ser Arg Ser Arg Gln Val Gly Ser Ser Met Phe
385                 390                 395                 400

Cys Phe Asp Gly Pro Leu Thr Leu Val Ser Tyr Lys Pro Lys Pro Ser
                405                 410                 415

Lys Met Val Phe Leu Leu Ser Ser Cys Asn Glu Asp Ala Val Val Asn
            420                 425                 430
```

```
Gln Ser Asn Gly Lys Pro Asp Met Ile Leu Phe Tyr Asn Gln Thr Lys
        435                 440                 445

Gly Gly Val Asp Ser Phe Asp Gln Met Cys Ser Ser Met Ser Thr Asn
    450                 455                 460

Arg Lys Thr Asn Arg Trp Pro Met Ala Val Phe Tyr Gly Met Leu Asn
465                 470                 475                 480

Met Ala Phe Val Asn Ser Tyr Ile Ile Tyr Cys His Asn Met Leu Ala
                485                 490                 495

Lys Lys Glu Lys Pro Leu Ser Arg Lys Asp Phe Met Lys Lys Leu Ser
            500                 505                 510

Thr Asp Leu Thr Thr Pro Ser Met Gln Lys Arg Leu Glu Ala Pro Thr
        515                 520                 525

Leu Lys Arg Ser Leu Arg Asp Asn Ile Thr Asn Val Leu Lys Ile Val
    530                 535                 540

Pro Gln Ala Ala Ile Asp Thr Ser Phe Asp Glu Pro Glu Pro Lys Lys
545                 550                 555                 560

Arg Arg Tyr Cys Gly Phe Cys Ser Tyr Lys Lys Lys Arg Met Thr Lys
                565                 570                 575

Thr Gln Cys Phe Lys Cys Lys Lys Pro Val Cys Gly Glu His Asn Ile
            580                 585                 590

Asp Val Cys Gln Asp Cys Ile
        595
```

<210> 30
<211> 567
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 30

Met Ala Arg Ser Thr Arg Glu Ala Lys Ser Cys Ala Leu Glu Arg Ile
1   5   10   15

Leu Gly Arg Glu Met Asn Met Pro Asp Ala Gln Ile Asp Leu Glu Glu
            20   25   30

Ser Asp Lys Glu Glu His Leu Ser Asp Ile Glu Glu Ala Glu Leu Glu
        35   40   45

Val Ala Leu Ser Asp Ala Ser Asp Gly Ser Ser Ser Ser Cys Ser Arg
    50   55   60

Pro Glu Ser Pro Glu Pro Ala Ala Gln Ala Glu Ala Val Gly His Arg
65   70   75   80

Tyr Val Ser Pro Ser Gly Gln Ala Trp Ser Thr Asn Pro Pro Ala Arg
                85   90   95

Cys Gly Gln Arg Pro Ala Gly Asn Ile Leu Arg Leu Arg Pro Gly Ile
            100   105   110

Thr Gln Phe Ala Thr Ala Arg Leu His Asp Glu Glu Ser Ala Phe Lys
        115   120   125

Leu Leu Phe Asp Ala Asp Met Val Asp Thr Ile Val Val Glu Thr Asn
    130   135   140

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

Val Glu Met Tyr Gly Tyr Ile Gly Leu Cys Phe Leu Arg Gly Val Phe
                165   170   175

```
Lys Gly Asn Met Glu Ser Ile Glu Glu Leu Trp Ser Ala Asp Cys Gly
            180                 185                 190

Arg Lys Ile Phe Ala Glu Thr Met Ser Leu Ser Arg Phe Lys Ser Leu
        195                 200                 205

Leu Arg Phe Leu Arg Phe Asp Asn Arg Glu Thr Arg Ala Ala Arg Leu
    210                 215                 220

Gln Arg Asp Lys Leu Ala Ala Val Arg Leu Leu Leu Asp Gly Leu Val
225                 230                 235                 240

Ser Asn Ser Gln Arg Ser Tyr Val Pro Ser Gly Ala Val Thr Val Asp
                245                 250                 255

Glu Gln Leu Phe Pro Tyr Arg Gly Arg Cys Arg Tyr Ile Gln Tyr Met
            260                 265                 270

Pro Met Lys Pro Ala Lys Tyr Gly Leu Lys Phe Trp Cys Leu Asn Asp
        275                 280                 285

Ala Ala Asn Ala Tyr Cys Trp Asn Leu Gln Met Tyr Val Gly Arg Glu
    290                 295                 300

Glu Asp Arg Glu Val Ser Leu Gly Glu His Val Val Leu Arg Leu Ala
305                 310                 315                 320

Glu Gly Leu Arg Gly Ser Gly Met Gly Ile Thr Val Asp Asn Phe Phe
                325                 330                 335

Cys Ser Leu Ser Leu Ala Arg Arg Leu Gln Arg Trp Asn Leu Thr Leu
            340                 345                 350

Leu Gly Ser Met Arg Ser His Arg Arg Glu Val Pro Leu Gln Met Arg
        355                 360                 365

Ser Cys Arg Asn Arg Gln Leu His Ser Thr Glu Phe Val Tyr Thr Glu
    370                 375                 380
```

```
Glu Asp Lys Ile Gln Leu Ala Ala Tyr Lys Ala Lys Pro Asn Lys Leu
385                 390                 395                 400

Val Leu Ile Leu Ser Ser Gln His Ser Ser Pro Ala Val Ser Ala His
                405                 410                 415

Pro Ala Gln Lys Pro Gln Val Ile Leu Asp Tyr Asn Ala Thr Lys Gly
            420                 425                 430

Gly Thr Asp Leu Met Asp Gln Met Thr Ser Cys Tyr Ser Thr Lys Tyr
        435                 440                 445

Lys Ser Arg Arg Trp His Val Pro Val Phe Cys Asn Leu Leu Asn Ile
    450                 455                 460

Ala Gly Leu Asn Ser Phe Leu Leu His Gln Thr Val Phe Pro Asn Arg
465                 470                 475                 480

Phe Ala Asn Ala Pro His Arg Arg Arg Leu Tyr Leu Val Ala Leu Gly
                485                 490                 495

Arg Ala Leu Thr Gln Pro Leu Arg Tyr Gln Val Glu Ala Gly Arg Asn
            500                 505                 510

Pro Pro Ala Thr Val Pro Val His Gly Val Gln Arg Gly Arg Cys His
        515                 520                 525

Met Cys Gly Arg Ser Lys Asp Arg Lys Thr Arg Thr Arg Cys Thr His
    530                 535                 540

Cys Asp Arg Phe Cys Cys Ala Glu His Leu Gln Glu Ile Cys Leu Ala
545                 550                 555                 560

Cys Thr Gly Asp Met Pro Glu
                565
```

<210> 31
<211> 564
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 31

```
Met Ser Asp Ser Ser Asp Asp Asp Ile Val Ser Pro Gly Met Lys Arg
1               5                  10                  15


Lys Arg Val Asn Ile Phe Pro Ser Ser Ser Glu Glu Asn Asp Glu Ser
            20                  25                  30


Ile Glu Ser Asp Ser Glu Thr Asp Gln Tyr Asp Ser Asp Asp Ile Tyr
        35                  40                  45


Ser Glu Asp Asn Lys Asn Asn Lys Glu Asn Gln Tyr Thr Asn Val Lys
    50                  55                  60


Trp Lys Ser Thr Ser Gly Asn Arg Lys Pro Phe Asp Phe Ile Ala Asn
65                  70                  75                  80


Asn Gly Gln Gln Glu Ile Val Pro Gly Arg Phe Arg Ser Lys Cys Ser
                85                  90                  95


Ser Tyr Val Glu Lys Tyr Leu Asp Asp His Leu Ile Ser Ile Ile Val
            100                 105                 110


Lys Glu Thr Asn Leu Tyr Ala Asp Gln Phe Leu Gln Ser His Pro Asn
        115                 120                 125


Leu Lys Pro Arg Ser Arg Met Arg Lys Trp Tyr Ser Thr Thr Asn Asn
    130                 135                 140


Glu Val Arg Cys Phe Ile Ala Ile Leu Ile Leu Gln Gly Ile Val Lys
145                 150                 155                 160
```

```
Lys Pro Ala Leu Asp Met Tyr Phe Leu Lys Arg Glu Ile Ile Cys Ser
                165                 170                 175

Pro Phe Phe Gly Lys Ile Phe Ser Ala Asp Arg Phe Leu Leu Leu Cys
            180                 185                 190

Lys Phe Leu Tyr Phe Glu Asn Asn Ala Pro His Asn Asp Met Pro Ser
        195                 200                 205

Lys Lys Leu Cys Lys Ile Lys Thr Val Leu Glu Tyr Val Ile Asn Lys
    210                 215                 220

Cys Lys Ser Leu Tyr Thr Pro Lys Met Asp Ile Cys Ile Asp Glu Ser
225                 230                 235                 240

Leu Leu Met Trp Lys Gly Arg Leu Ser Trp Arg Gln Tyr Ile Pro Ser
                245                 250                 255

Lys Arg Ser Arg Phe Gly Ile Gln Phe Phe Val Leu Cys Glu Ser Glu
            260                 265                 270

Ser Gly Tyr Ile Trp Asn Phe Phe Ile Tyr Thr Gly Lys Glu Thr Tyr
        275                 280                 285

Cys Asp Ser Gln Tyr Ser Glu Phe Asn Ile Ser Ala Arg Ile Val Leu
    290                 295                 300

Gln Leu Cys Asp Glu Leu Phe Glu Arg Gly Tyr Arg Leu Tyr Leu Asp
305                 310                 315                 320

Asn Trp Tyr Thr Gly Val Pro Phe Ile Glu Lys Leu Cys Ala His Lys
                325                 330                 335

Thr Asp Val Val Gly Thr Ile Arg Lys Asn Arg Ile Gly Ile Cys Glu
            340                 345                 350

Glu Val Arg Glu Thr Arg Ile Lys Lys Gly Glu Tyr Ile Ala Arg Phe
        355                 360                 365
```

```
Lys Asn Lys Ile Met Leu Leu Lys Trp Arg Asp Lys Arg Glu Val Tyr
    370                 375                 380

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

Asn Val Ile Lys Lys Val Pro Glu Val Val Phe Asp Tyr Asn Asn Lys
                405                 410                 415

Met Gly Gly Val Asp Met Ser Asp Ser Ile Ile Ile Ala Tyr Ser Thr
            420                 425                 430

Ala Arg Lys Arg Leu Lys Lys Tyr Tyr Lys Lys Ile Phe Leu His Leu
        435                 440                 445

Leu Asp Val Ile Cys Leu Asn Ser Tyr Leu Ile Tyr Lys Met Asn Gly
    450                 455                 460

Gly Lys Leu Ser Arg Ile His Phe Leu Leu Glu Tyr Ile Glu Asp Thr
465                 470                 475                 480

Ile Ala Ser Tyr Pro Ile Glu Ser Arg Asn Leu Pro Lys Ser Arg Ser
                485                 490                 495

Thr Ala Pro Asn Val Ser Arg Leu Ile Glu Lys His Phe Pro Asp Tyr
            500                 505                 510

Ile Pro Gly Ser Ser Arg Thr Thr Asn Pro Ser Arg Arg Cys Ala Val
        515                 520                 525

Cys Tyr Lys Lys Lys Ile Arg Lys Glu Ser Arg Tyr Trp Cys Pro Thr
    530                 535                 540

Cys Gln Val Pro Leu Cys Val Val Pro Cys Phe Arg Glu Tyr His Thr
545                 550                 555                 560
```

Thr Glu Thr Ile

<210> 32
<211> 553
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 32

```
Met Phe Ser Arg Lys Arg Phe Cys Asp Glu Asp Ser Glu Asn Cys Ala
1               5                   10                  15


Ile Asn Phe Ala Asn Glu Ser Asp Ser Ser Asp Glu Ile Cys Lys Phe
            20                  25                  30


Arg Arg Lys Tyr Arg Arg Ile Ile Val Asp Asp Thr Ser Asp Asp Asp
        35                  40                  45


Gln Leu Pro Glu Ser Trp Val Trp Asn Glu Arg Arg Asn Ser Pro Lys
    50                  55                  60


Ile Trp Asp Tyr Thr Met Thr Pro Gly Ile Ser Glu Ala Ala Leu Cys
65                  70                  75                  80


Gln Leu Gly Gly Ser Arg Gly Glu Phe Asp Thr Phe Asn Leu Thr Phe
                85                  90                  95


Asp Asp Ile Phe Trp Asn Asn Ile Val Thr Glu Thr Asn Gln Tyr Ala
            100                 105                 110


Asn Gln Leu Arg Glu Asn Pro His Thr Arg Arg Lys Ile Asp Glu Thr
        115                 120                 125


Trp Phe Pro Val Asp Ser Thr Glu Ile Lys Arg Tyr Phe Ala Leu Thr
    130                 135                 140
```

```
Ile Ile Met Ala Gln Ile Lys Lys Pro Arg Ile Gln Met Asn Trp Ser
145                 150                 155                 160

Lys Arg Ala Val Ile Glu Thr Pro Ile Phe Arg Lys Ser Met Pro Leu
                165                 170                 175

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

Leu Val Ala Asn Thr Asp Lys Leu Lys Lys Val Arg Pro Val Ile Asn
        195                 200                 205

Phe Leu Asn Gln Lys Phe Lys Glu Leu Tyr Ile Met Arg Lys Asp Ile
    210                 215                 220

Ser Ile Asp Glu Ser Leu Met Lys Phe Arg Gly Arg Leu Ser Tyr Lys
225                 230                 235                 240

Gln Phe Asn Pro Ser Lys Arg Ala Arg Phe Gly Val Lys Phe Tyr Lys
                245                 250                 255

Leu Cys Glu Ser Asp Ser Gly Tyr Cys Tyr Glu Phe Lys Ile Tyr Thr
            260                 265                 270

Gly Asn Asp Lys Ile Asn Cys Lys Asp Ser Ala Ser Glu Ser Val Val
        275                 280                 285

Lys Glu Leu Ser Glu Ser Val Leu His Arg Gly His Thr Leu Tyr Ile
    290                 295                 300

Asp Ser Trp Tyr Ser Ser Pro Lys Leu Phe Met Ile Leu Ser His Lys
305                 310                 315                 320

Tyr Lys Thr Asn Val Ile Gly Thr Val Arg Ser Asn Arg Lys Asn Met
                325                 330                 335

Pro Lys Asp Leu Cys Ser Val Lys Leu Lys Arg Gly Glu Tyr Val Ile
            340                 345                 350
```

```
Arg Ser Cys Asn Arg Val Leu Ala Leu Lys Trp Arg Asp Lys Arg Asp
        355                 360                 365

Val Tyr Met Met Ser Thr Lys His Glu Thr Ala Glu Met Thr Ser Gln
    370                 375                 380

Gly Ser Lys Arg Thr Leu Lys Pro Asn Cys Ile Thr Glu Tyr Asn Lys
385                 390                 395                 400

Gly Met Asn Gly Ile Asp Leu Gln Asp Gln Ile Leu Ala Cys Phe Pro
                405                 410                 415

Ile Met Arg Lys Tyr Met Lys Gly Tyr Lys Lys Ile Phe Phe Tyr Leu
            420                 425                 430

Phe Asp Ile Gly Leu Phe Asn Ser Tyr Ile Leu Trp Lys Lys Leu Asn
        435                 440                 445

Asp Gly Lys Lys Gln Cys Tyr Val Asp Tyr Lys Ile Asn Ile Ala Glu
    450                 455                 460

Ser Leu Leu Lys Lys Met Pro Lys Pro Ile Tyr Lys Glu Arg Gly Val
465                 470                 475                 480

Leu Ser Ser Gly Asp Ala Pro Asp Arg Leu Cys Ala Lys Glu Trp Ala
                485                 490                 495

His Phe Pro Lys His Ile Asp Pro Thr Pro Ser Lys Leu Arg Pro Ser
            500                 505                 510

Lys Arg Cys Thr Val Cys His Lys Asn Lys Lys Arg Lys Glu Thr Thr
        515                 520                 525

Trp Glu Cys Lys Lys Cys Lys Val Pro Leu His Val Pro Glu Cys Phe
    530                 535                 540
```

```
Glu Arg Tyr His Thr Val Thr Asp Tyr
545                 550


<210>  33
<211>  616
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  33

Met Ser Glu Ile Asn Asn Ala Gly Asn Ser Lys Ser Lys Arg Pro Ser
1               5                   10                  15


Thr Gly Ser Val Gln Gly Pro Ala Arg Lys Asn Phe Arg Val Ala Asp
            20                  25                  30


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


Asp Asn Glu Glu Asn Ile Glu Gly Leu Phe Ile Leu Glu Asn Glu Leu
    50                  55                  60


Ile Gln Asn His Glu Ser Asp Asn Asp Glu Asp Gln Asp Gln Glu Ser
65                  70                  75                  80


Asp Gln Val Leu Gly Glu Glu Thr Asp Ser Asp Ser Ser Asp Asn Ile
                85                  90                  95


Pro Leu Ala Gln Phe Val Ala Ser Asn Tyr Tyr Tyr Gly Lys Asn Arg
            100                 105                 110


Tyr Lys Trp Ser Lys Thr Pro Pro Leu Ala Arg Val Arg Thr Pro Gln
        115                 120                 125


His Asn Ile Ile Thr Ser Arg Ala Gly Ser Ser Lys Leu Thr Ser Glu
    130                 135                 140
```

```
Asp Gly Lys Asp His Tyr Ser Ile Trp Asn Lys Leu Phe Asp Glu Glu
145                 150                 155                 160

Met Leu Gln Cys Ile Leu Thr Trp Thr Asn His Arg Ile Ser Ser Tyr
                165                 170                 175

Arg Thr Lys Tyr Val Arg Tyr Asn Arg Pro Glu Leu Asn Asp Leu Asp
            180                 185                 190

Met Val Glu Leu Lys Ala Phe Ile Gly Leu Leu Phe Tyr Ser Ala Val
        195                 200                 205

Leu Lys Ser Asn Asp Glu Asn Thr Ser Tyr Leu Phe Ala Ser Asp Gly
    210                 215                 220

Thr Gly Cys Glu Ile Phe Arg Cys Gly Met Ser Glu Thr Arg Phe Leu
225                 230                 235                 240

Val Leu Leu Leu Cys Leu Arg Phe Asp Asn Pro Asp Asp Arg Glu Glu
                245                 250                 255

Arg Met Lys Ala Asp Lys Leu Ala Ala Ile Ser His Ile Phe Asn Lys
            260                 265                 270

Phe Val Ser Asn Ser Gln Gln Leu Tyr Glu Leu Ser Glu Cys Val Thr
        275                 280                 285

Val Asp Glu Met Leu Val Lys Phe Arg Gly Arg Ser Tyr Met Ile Ser
    290                 295                 300

Tyr Met Pro Lys Lys Pro Gly Lys Tyr Gly Leu Ile Ile Arg Ala Leu
305                 310                 315                 320

Cys Asp Ala Asn Asn Phe Tyr Phe Tyr Asn Gly Tyr Ile Tyr Ser Gly
                325                 330                 335

Lys Gly Ser Asp Gly Ile Gly Leu Thr Ala Gln Glu Lys Lys Phe Leu
            340                 345                 350
```

```
Val Pro Thr Gln Cys Val Leu Arg Leu Thr Lys Pro Ile His Gly Thr
        355                 360                 365

Asn Arg Asn Val Thr Ala Asp Asn Trp Phe Ser Ser Ile Glu Leu Val
    370                 375                 380

Asp Gln Leu Ser Ser Arg Lys Leu Thr Tyr Val Gly Thr Leu Lys Lys
385                 390                 395                 400

Asn Lys Arg Glu Ile Pro Lys Glu Phe Gln Pro Lys Lys Gln Arg Glu
                405                 410                 415

Val Asn Ser Thr Leu Phe Gly Phe Thr Ser Thr Lys Thr Leu Cys Ser
            420                 425                 430

Tyr Val Pro Lys Lys Asn Arg Ala Val Ile Leu Val Ser Ser Met His
        435                 440                 445

His Ser Asn Gln Val Asp Glu Asn Thr Lys Lys Pro Glu Ile Ile Met
    450                 455                 460

Tyr Tyr Asn Ser Thr Lys Gly Gly Val Asp Glu Ala Asp Lys Lys Cys
465                 470                 475                 480

Ser Ile Tyr Ser Ser Ser Arg Arg Thr Arg Arg Trp Pro Met Val Leu
                485                 490                 495

Leu Tyr Arg Val Leu Asp Leu Thr Ala Met Asn Ala Tyr Ile Leu Tyr
            500                 505                 510

Asn Met His Gln Pro Lys Ala Val Glu Arg Gly Asp Phe Leu Lys Lys
        515                 520                 525

Leu Ala Arg Val Leu Val Val Pro His Val Gln Arg Arg Val Ile Asn
    530                 535                 540
```

```
Ala Arg Leu Pro Arg Glu Leu Arg Leu Thr Met Asn Arg Val Leu Gly
545                 550                 555                 560


Asp Asp Met Val Thr Glu Gly Val Gln Asp Gln Glu Thr Ile Gln Gly
                565                 570                 575


Ser Arg Arg Ala Cys Arg Ile Cys Pro Ala Lys Lys His Arg Met Thr
            580                 585                 590


Thr Tyr Val Cys Val Gly Cys Lys Lys Pro Val Cys Leu Gln Cys Ser
        595                 600                 605


Arg Pro Leu Cys Thr Asp Cys Gln
    610                 615
```

<210> 34
<211> 609
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 34

```
Met Phe Tyr Ser Met Ser Val Val Asn Leu Leu Ile Phe Tyr Ser Ile
1               5                   10                  15


Leu Pro Thr Met Ser Leu Ser Asn His Pro Asp Arg Ile Leu Thr Leu
            20                  25                  30


Leu Glu Glu Ser Asp Ser Glu Asp Glu Asn Asn Asp Thr Ala Ser Asp
        35                  40                  45


Val Asp Asn Glu Asp His Leu Ser Glu Arg Ser Asn Asn Ser Asp Ser
    50                  55                  60


Glu Glu Asp Ala Ser Ser Ile Asp Ser Asp Ser Ser Glu Asn Leu Asp
65                  70                  75                  80
```

```
Leu Leu Ser Leu Gln Asn Arg Leu Arg Gln Gln Val Phe Arg Gly Lys
                85                  90                  95

Asp Gly Thr Leu Trp Gln Lys Glu Pro Gly Arg Ser Asn Val Arg Thr
            100                 105                 110

Arg Ser Glu Asn Ile Ile Thr Glu Leu Pro Gly Val Lys Leu Ile Ala
        115                 120                 125

Arg Asp Ala Lys Thr Val Phe Glu Cys Trp Asn Leu Phe Ile Thr Gln
    130                 135                 140

Asp Met Leu Tyr Thr Ile Lys Thr Cys Thr Asn Ser His Ile Gln Glu
145                 150                 155                 160

Arg Arg Ala Leu Cys Ala Asp Val Ser Lys Gln Arg Phe Met Ser Glu
                165                 170                 175

Val Glu Ile Ser Glu Leu Lys Ala Phe Ile Gly Leu Leu Tyr Leu Ala
            180                 185                 190

Gly Phe Tyr Arg Ser Asn Arg Gln Asn Leu Lys Asp Leu Trp Gln Lys
        195                 200                 205

Asp Gly Thr Gly Ile Glu Ile Phe Arg Leu Thr Met Ser Ile Gln Arg
    210                 215                 220

Phe Tyr Phe Ile Gln Ser Cys Leu Arg Phe Asp Asp Lys Asn Thr Arg
225                 230                 235                 240

Ala Glu Arg Gln Asn Leu Asp Asn Leu Ala Pro Ile Arg Glu Leu Phe
                245                 250                 255

Lys Glu Phe Thr Glu Gln Cys Leu Ser Met Tyr Ser Pro Gly Glu Asn
            260                 265                 270

Cys Thr Ile Asp Glu Met Leu Val Ala Phe Arg Gly Arg Cys Lys Phe
        275                 280                 285
```

```
Arg Gln Tyr Ile Pro Ser Lys Pro Ala Lys Tyr Gly Ile Lys Ile Phe
    290                 295                 300

Ala Leu Val Asp Ser Lys Thr Phe Tyr Val Lys Asn Leu Glu Ile Tyr
305                 310                 315                 320

Ala Gly Lys Gln Pro Ser Gly Pro Tyr Ser Val Ser Asn Lys Pro Phe
                325                 330                 335

Asp Val Val Asn Arg Leu Val Leu Pro Ile Ser Lys Thr His Arg Asn
            340                 345                 350

Val Thr Phe Asp Asn Trp Phe Thr Ser Tyr Glu Val Val Ser His Leu
        355                 360                 365

Leu Asn Glu His Arg Leu Thr Thr Val Gly Thr Val Arg Lys Asn Lys
    370                 375                 380

Lys Gln Ile Pro Pro Gln Phe Leu Asn Ile Arg Gly Lys Glu Leu Asn
385                 390                 395                 400

Ser Ser Thr Phe Gly Phe Gln Lys Asp Ile Ser Leu Val Ser Tyr Ile
                405                 410                 415

Pro Lys Lys Asn Lys Ile Val Leu Leu Met Ser Ser Leu His His Asp
            420                 425                 430

Ala Asn Ile Asp Gln Ser Thr Gly Asp Gln Arg Lys Pro Glu Ile Ile
        435                 440                 445

Thr Tyr Tyr Asn Ala Thr Lys Ser Gly Val Asp Val Ala Asp Glu Leu
    450                 455                 460

Ser Ala Thr Tyr Asp Val Ser Arg Asn Ser Lys Arg Trp Pro Met Thr
465                 470                 475                 480
```

```
Ser Phe Tyr Ala Met Leu Asn Ile Ser Gly Ile Asn Ala Asn Ile Ile
                485                 490                 495

Tyr Arg Ala Asn Asn Thr Asp Thr Arg Met Thr Arg Arg His Phe Leu
            500                 505                 510

Lys Lys Leu Gly Leu Asp Leu Ile His Asp His Leu Glu Val Arg Lys
        515                 520                 525

Thr Gln Met Asn Leu Pro Arg Leu Leu Arg Lys Arg Ile Leu Asp Phe
    530                 535                 540

Val Gly Gly Pro Ala Glu Glu Pro Pro Arg Lys Ile Thr Gly Thr Arg
545                 550                 555                 560

Lys Arg Cys Gln Ile Cys Pro Ala Lys Lys Asp Lys Lys Thr Asn His
                565                 570                 575

Thr Cys His Val Cys His Ile Tyr Ile Cys Pro Asp His Ile Ile Pro
            580                 585                 590

Tyr Cys Asn Asn Cys Ser Thr Ser Met Ala Ile Ser Asp Asp Val Glu
        595                 600                 605

Asp
```

<210> 35
<211> 615
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 35

```
Met Thr Arg Glu Ser Ile Ser Ser Asp Glu Ile Ile Arg Ile Leu Met
1               5                   10                  15
```

```
Asn Glu Asp Glu Ala Asn Gly Asp Asp Ile Phe Glu Glu Glu Cys Ser
            20                  25                  30

Asp Asp Asp Phe Val Glu Glu Asp Asp Ala Ala Asn Asp Glu Val Asp
        35                  40                  45

Val Glu Ser Val Val Asp Ser Glu Asn Glu Ser Glu Ile Ile Val Thr
    50                  55                  60

Glu Ser Lys Thr Ser Gly Lys Arg Lys Arg Val Gly Cys Asn Gly Asn
65                  70                  75                  80

Ala Gln Ala Leu Lys Lys Gly Lys Lys Ser Asp Asn Cys Trp Phe Thr
                85                  90                  95

Gln Glu Gly Thr Ile Val Thr Pro Lys Lys Arg Ile Leu Ile Gly Lys
            100                 105                 110

Asn Gly His Thr Trp His Ser Glu Pro Pro Pro Leu Gly Lys Thr Pro
        115                 120                 125

Glu Arg Asn Ile Val Met Arg Met Pro Gly Pro Lys Arg Ala Ala Lys
    130                 135                 140

Glu Ala Ile Ser Glu Arg Gln Cys Trp Asn Leu Phe Leu Asn Ser Asp
145                 150                 155                 160

Met Met Thr Ile Val Val Lys Asn Thr Asn Glu Glu Ile Ala Arg Gln
                165                 170                 175

Arg Gln Asn Tyr Ser Ser Ala Gln Ser Phe Thr Gly Asp Thr Cys Thr
            180                 185                 190

Glu Glu Met His Ala Tyr Phe Gly Ile Leu Ile Thr Ser Ala Ala Leu
        195                 200                 205

Lys Asp Asn His Leu Ser Val Glu Asp Met Trp Asn Asn Phe Tyr Gly
    210                 215                 220
```

```
Lys Pro Leu Tyr Arg Ala Ala Met Ser Lys Glu Arg Phe Arg Phe Leu
225                 230                 235                 240

Thr Asn Cys Met Arg Phe Asp Asp Lys Asn Thr Arg Asp Ala Arg Lys
                245                 250                 255

Ala Ser Asp Pro Phe Ala Ala Ile Arg Asp Ile Thr Asp Met Phe Ala
            260                 265                 270

Ser Asn Cys Gln Glu Met Tyr Thr Pro Ser Thr Cys Cys Thr Ile Asp
        275                 280                 285

Glu Gln Leu Leu Ala Phe Arg Gly Arg Cys Pro Phe Arg Ile Tyr Ile
    290                 295                 300

Pro Asn Lys Pro Ala Lys Tyr Gly Ile Lys Leu Val Met Leu Cys Asp
305                 310                 315                 320

Ser Lys Thr Phe Tyr Ala Val Asn Ile Ile Pro Tyr Val Gly Lys Ala
                325                 330                 335

Thr His Asn Gly Asp Ile Pro Leu Ala Asp Tyr Phe Val Lys Glu Leu
            340                 345                 350

Ser Lys Pro Ile His Gly Thr Asn Arg Asn Ile Thr Thr Asp Asn Trp
        355                 360                 365

Phe Thr Ser Val Ser Leu Gly Ser Ser Leu Leu Glu Asp Tyr Lys Leu
    370                 375                 380

Thr Thr Val Gly Thr Leu Arg Lys Asn Lys Lys Glu Ile Pro Pro Glu
385                 390                 395                 400

Met Thr Met Val Ser Gly Arg Lys Leu Glu Thr Ser Leu Phe Ile Phe
                405                 410                 415
```

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

Val Leu Leu Leu Ser Thr Met His Gln Gly Lys Tyr Val Ile Pro Glu
        435                 440                 445

Thr Lys Lys Pro Glu Ile Ile Glu Phe Tyr Asn Lys Thr Lys Gly Gly
    450                 455                 460

Val Asp Thr Met Asp Gln Leu Cys Asn Thr Tyr Ser Cys Ser Arg Lys
465                 470                 475                 480

Thr Arg Arg Trp Pro Leu Cys Val Phe Tyr Gly Leu Met Asn Ile Ala
                485                 490                 495

Gly Val Asn Ala Ala Val Ile Tyr Asn Thr Asn Met Ala Val Lys Gly
            500                 505                 510

Arg Glu Ile Ile Pro Arg Lys Thr Phe Leu Leu Arg Leu Gly Arg Glu
        515                 520                 525

Leu Val Ile Pro Trp Ile Glu Ala Arg Ser Val Lys Pro Thr Leu Gln
    530                 535                 540

Ser Lys Val Arg Gln Val Ile Ser Glu Val Leu Gly Leu Glu Asn Thr
545                 550                 555                 560

Gln Lys Asp Asn Ser Asn Val Asn Gln Gln Val Asn Ser Gly Lys Lys
                565                 570                 575

Ala Gly Arg Cys Ser Val Cys Pro Arg Lys Asn Asp Arg Lys Thr Thr
            580                 585                 590

Val Lys Cys Asp Lys Cys Lys Glu Phe Val Cys Asn Ala His Lys Ile
        595                 600                 605

Ser Leu Cys Gln Lys Cys Lys
    610                 615
```

<210> 36
<211> 568
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 36

```
Met Gly Asp Tyr Glu Lys Glu Gln Gln Arg Leu Leu Ala Leu Trp Glu
1               5                  10                  15


Asp Met Glu Ser Asp Asp Glu Val Ile Asn Asn Asp Asp Ser Glu Glu
            20                  25                  30


Glu Asp Ile Asp Asn Ile Ser Val Cys Ser Asp Tyr Pro Asp Met Glu
        35                  40                  45


Gln Asp Ala Glu Asp Glu Leu Glu Pro Ala Glu Glu Gln Thr Gln Ala
    50                  55                  60


Lys Tyr Phe Phe Gly Lys Asp Gly Thr Lys Trp Ser Lys Gln His Pro
65                  70                  75                  80


Asn Lys Lys Val Arg Thr Arg Ala Glu Asn Ile Ile Ile His Leu Pro
                85                  90                  95


Gly Val Lys Lys Pro Ala Lys Met Ala Lys Thr Pro Leu Glu Cys Phe
            100                 105                 110


Ser Leu Phe Ile Asp Glu Gln Met Ile Ala Asp Ile Val Glu Arg Thr
        115                 120                 125


Asn Glu Arg Ile Thr Glu Lys Cys Ala Gln Trp Lys Asp Ser Pro His
    130                 135                 140


Tyr Gly Gln Thr Ser Ala Val Glu Ile Lys Ala Ile Phe Gly Leu Leu
145                 150                 155                 160
```

```
Tyr Leu Ser Gly Val Phe Arg Asn Asn His Arg His Leu Tyr Glu Leu
                165                 170                 175

Trp Asn Thr Asp Gly Thr Gly Met Asp Ile Phe Pro Ala Thr Met Ser
            180                 185                 190

Gln Arg Arg Cys Glu Phe Leu Ile Ser Cys Leu Arg Phe Asp Asn Lys
        195                 200                 205

Ser Asn Arg Ala Glu Arg Val Asn Val Asp Lys Leu Ala His Ile Arg
    210                 215                 220

Ala Ile Phe Asp Arg Phe Val Gln Asn Cys Gln Ser Ala Tyr Ser Pro
225                 230                 235                 240

Ser Glu Tyr Leu Thr Ile Asp Glu Lys Leu Glu Ser Phe Arg Gly Lys
                245                 250                 255

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

Lys Val His Ala Leu Val Asp Ala Arg Thr Tyr Tyr Val Leu Asn Met
        275                 280                 285

Glu Val Tyr Val Gly Gln Gln Pro Gln Gly Pro Phe Arg Val Ser Asn
    290                 295                 300

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

Asn Arg Asn Ile Thr Phe Asp Asn Trp Tyr Thr Ser Leu Glu Leu Leu
                325                 330                 335

Gln Ser Leu Arg Gln Lys His Gln Leu Thr Ala Val Gly Thr Ile Arg
            340                 345                 350
```

```
Lys Asn Lys Pro Tyr Leu Pro Pro Ala Phe Leu Asn Val Lys Asn Arg
        355                 360                 365

Asp Ile Cys Ser Thr Leu Phe Gly Phe His Glu Gly Asn Thr Leu Val
    370                 375                 380

Ser Tyr Cys Pro Lys Lys Gly Lys Val Val Leu Leu Leu Ser Ser Leu
385                 390                 395                 400

His His Asp Asp Ala Val Asp Gln Thr Asp Lys Lys Leu Pro Glu Val
                405                 410                 415

Ile Ser Phe Tyr Asn Phe Thr Lys Cys Gly Val Asp Val Val Asp Glu
            420                 425                 430

Met Ser Ala Ser Tyr Asn Val Ser Arg Asn Ser Arg Arg Trp Pro Leu
        435                 440                 445

Thr Leu Phe Tyr Ser Leu Leu Asn Thr Thr Gly Ile Asn Ser Gln Ile
    450                 455                 460

Ile Tyr Arg Glu Asn Asn Asn Gly Ile Lys Met Ala Arg Arg His Phe
465                 470                 475                 480

Leu Lys Lys Leu Gly Ile Gln Leu Val Glu Ala His Gln Arg Ser Arg
                485                 490                 495

Met Ser Asn Pro Arg Leu Thr Arg Glu Leu Arg Gly Asn Ile Arg Lys
            500                 505                 510

Leu Leu Lys Glu Leu Leu Pro Ser Glu Val Phe Glu Tyr Ser Glu Pro
        515                 520                 525

Leu Ser Lys Lys Arg Asn Phe Gln Gln Gly Arg Cys Ser Glu Cys Pro
    530                 535                 540

Arg Ala Lys Asp Arg Lys Thr Arg Tyr Val Cys Glu Ala Cys Asp Lys
545                 550                 555                 560
```

Phe Ile Cys Leu Ile Leu Tyr Ala
565

<210> 37
<211> 577
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 37

Met Glu Pro Asp Glu Cys Arg Arg Ile Gln Asp Leu Leu Gln Glu Val
1 5 10 15

Glu Glu Glu Glu Leu Val Ser Ser Glu Asp Glu Asp Ser Glu Val Asp
20 25 30

Glu Val Gln Phe Ser Asp His Asn Ser Glu Ser Glu Leu Ser Glu Glu
35 40 45

Glu Met Pro Val Val Glu Leu His Asp Gly Pro Thr Tyr Lys Gly Arg
50 55 60

Asp Asn Val Thr Thr Trp Arg Lys His Gln Leu Pro Arg Asn Val Arg
65 70 75 80

Thr Arg Gln Gln Asn Ile Val Ile His Leu Pro Gly Val Arg Pro Ile
85 90 95

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

Asp Thr Met Ile Glu Thr Ile Val Ala Ser Thr Asn Ile Lys Ile Ala
115 120 125

Lys His Ser Glu Lys Asn Lys Asn Asp Arg Ser Thr Tyr Leu Thr Ser
130 135 140

```
Ile Thr Glu Met Asn Ala Leu Phe Gly Leu Leu Ile Leu Ser Gly Leu
145                 150                 155                 160

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

Leu Gly Ile Asp Ile Phe Gln Thr Thr Met Ser Leu Lys Arg Phe Lys
            180                 185                 190

Phe Leu Ile Arg Tyr Met Arg Phe Asp Asp Ile Asn Thr Arg His Ala
        195                 200                 205

Arg Arg Gln Glu Asp Lys Leu Ala Pro Ile Arg Glu Ile Phe Glu Arg
    210                 215                 220

Phe Asn His Asn Cys Lys Gln Val Tyr Thr Val Ser Glu Tyr Cys Thr
225                 230                 235                 240

Leu Asp Glu Gln Leu Val Pro Phe Arg Gly Arg Cys Ser Phe Arg Met
                245                 250                 255

Tyr Ile Pro Ser Lys Pro Ala Lys Tyr Gly Leu Lys Ile Phe Thr Leu
            260                 265                 270

Val Asp Ala Arg Thr Trp Tyr Ile Leu Lys Ser Glu Val Tyr Val Gly
        275                 280                 285

Lys Gln Asn Asp Gly Ser Phe Lys Val Ser Asn Thr Thr Val Asp Val
    290                 295                 300

Thr Met Arg Leu Thr Glu Pro Ile His Arg Ser Gly Arg Asn Leu Thr
305                 310                 315                 320

Ile Asp Asn Trp Phe Thr Ser Phe Pro Leu Ala Glu Leu Leu Leu Gln
                325                 330                 335
```

```
Gln Asn Val Thr Met Val Gly Thr Met Lys Lys Asn Lys Lys Glu Leu
            340                 345                 350

Pro Pro Glu Leu Leu Ala Lys Gly Arg Pro Glu Lys Ser Ser Val Phe
        355                 360                 365

Ala Tyr Gln Asn Asn Lys Thr Val Val Ser Tyr Val Pro Lys Lys Asn
    370                 375                 380

Lys Asn Val Val Leu Leu Ser Thr Met His Leu Glu Asp Gly Thr Ile
385                 390                 395                 400

Asp Glu Thr Thr Gly Glu Asp Ser Lys Pro Glu Ile Ile Thr Phe Tyr
                405                 410                 415

Asn Met Thr Lys Gly Gly Val Asp Val Val Asp Lys Leu Cys Ser Thr
            420                 425                 430

Tyr Ser Thr Ala Arg Lys Thr Asn Arg Trp Pro Leu Val Leu Leu Phe
        435                 440                 445

Arg Ile Leu Asp Leu Ala Ser Val Asn Ser Tyr Val Val Phe Gln Gly
    450                 455                 460

Asn Asn Pro Gln Ser Lys Met Asn Arg Lys Ser Phe Leu Gln Glu Leu
465                 470                 475                 480

Gly Phe Thr Leu Val Ala Gln Gln Val Gln Thr Arg Ala Thr Gln Met
                485                 490                 495

Arg Leu Pro Lys Glu Ile Arg Gln Arg Ala Ala Lys Arg Ala Lys Met
            500                 505                 510

Asp Asn Ala Ile Ala Pro Ala Val Pro Pro Asn Pro Gly Gln Arg Ser
        515                 520                 525

Arg Cys Thr Val Cys Pro Arg Lys Asn Asp Met Lys Val Lys Thr Thr
    530                 535                 540
```

Cys Phe Lys Cys Asn Lys Tyr Met Cys Asn Lys His Met Lys Thr Val
545 550 555 560

Cys Glu Pro Cys Leu Ala Pro Ala Glu Asn Thr Ser Ser Asp Ser Asp
565 570 575

Tyr

<210> 38
<211> 589
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 38

Met Arg Arg Leu Val Phe Arg Met Cys Ser Asn Lys Asp Asp Glu Val
1 5 10 15

Gln Leu Glu Thr Phe Leu Asn Ser Phe Thr Leu Asp Asp Ala Ala Ile
20 25 30

Asp Pro Gln Tyr Glu Asp Asp Glu Asp Asp Asp Glu Ala Asp His Leu
35 40 45

Glu Glu Arg Thr Glu Cys Thr Asp Thr Glu Glu Glu Ile Ser Asp Thr
50 55 60

Glu Glu Asp Phe Gly Thr Ser Pro Thr Ser Asp Ala Phe Tyr Val Cys
65 70 75 80

Lys Asp Gly Val Thr Lys Trp Asn Lys Lys Leu Ala Pro Lys His Glu
85 90 95

Arg Val Pro Glu Asn Leu Leu Lys His Leu Pro Ser Pro Arg Thr Ala
100 105 110

```
Thr Lys Asn Leu Ile Ser Glu Ile Asp Ile Trp Ser Tyr Phe Phe Asn
        115                 120                 125


Glu Gly Met Leu Lys Val Ile Val Asp Cys Thr Asn Gln His Ile Ser
    130                 135                 140


Gly Thr Lys Ser His Phe Ser Arg Glu Arg Asp Ala Glu Asp Thr Asn
145                 150                 155                 160


Ile His Glu Ile Lys Ala Leu Leu Gly Leu Ile Tyr Met Ala Gly Val
                165                 170                 175


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


Cys Gly Ile Glu Ile Phe Arg Leu Thr Met Ser Ile Asn Arg Phe Leu
        195                 200                 205


Phe Leu Met Arg Asn Val Arg Phe Asp Asn Lys Glu Thr Arg Glu Gln
    210                 215                 220


Arg Lys Glu Ile Asp Lys Leu Ala Pro Ile Arg Gln Ile Phe Asp Asn
225                 230                 235                 240


Phe Val Val Asn Cys Gln Ser Ala Tyr Ser Pro Phe His Cys Val Thr
                245                 250                 255


Ile Asp Glu Lys Leu Glu Gly Phe Arg Gly Arg Cys Ser Phe Lys Gln
            260                 265                 270


Tyr Ile Pro Ser Lys Pro Asn Lys Tyr Gly Ile Lys Ile Phe Ala Leu
        275                 280                 285


Val Asp Ala Lys Cys Tyr Phe Thr Thr Asn Leu Glu Val Tyr Val Gly
    290                 295                 300
```

```
Lys Gln Pro Asp Gly Pro Tyr Ala Val Asp Asn Ser Ala Ser Ala Val
305                 310                 315                 320

Val Gln Arg Leu Cys Glu Pro Ile Asn Glu Ser Gly Arg Asn Val Thr
                325                 330                 335

Thr Asp Asn Trp Phe Thr Ser Ile Gln Leu Leu Glu Ala Leu Lys Glu
            340                 345                 350

Lys Lys Leu Thr Leu Leu Gly Thr Ile Arg Lys Asn Arg Lys Gly Leu
        355                 360                 365

Pro Lys Glu Phe Thr Gln Pro Pro Lys Ser Arg Ala Val Met Ser Thr
    370                 375                 380

Leu Phe Gly Phe Arg Asp Asn Ala Thr Leu Val Ser Tyr Lys Pro Lys
385                 390                 395                 400

Lys Asn Lys Asn Val Leu Leu Ile Ser Ser Gly His His Asp Asp Gly
                405                 410                 415

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

Thr Lys Gly Gly Val Asp Thr Val Asp Lys Leu Cys Ala Ser Tyr Asn
        435                 440                 445

Cys Ala Arg Ile Thr Arg Arg Trp Pro Met Val Val Phe Tyr Ala Leu
    450                 455                 460

Leu Asn Ile Ala Gly Ile Asn Ser Ile Val Ile His Lys Phe Asn Asn
465                 470                 475                 480

Pro Thr Val Thr Gln Pro Arg Arg Thr Phe Leu Arg Asn Leu Ser Met
                485                 490                 495

Ala Leu Ile Asp Gly His Leu Arg Gln Arg Ala Gln Leu His Cys Leu
            500                 505                 510
```

```
Pro Arg Gln Met Ser Ser Arg Ile Arg Glu Ile Thr Gly Tyr Glu Glu
        515                 520                 525

Pro Leu Gln Gly Ala Ala Ala Thr Pro Ser Asp Glu Asn Ile Pro Lys
    530                 535                 540

Arg Gly Arg Cys Ala Tyr Cys Asp Arg Arg Lys Asn Arg Pro Thr Lys
545                 550                 555                 560

Tyr Ser Cys Thr Thr Cys Gln Lys Phe Met Cys Leu Glu His Cys Thr
                565                 570                 575

Ile Val Cys Glu Glu Cys Phe Asn Lys Asp Glu Ile Phe
            580                 585
```

<210> 39
<211> 567
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 39

```
Met Phe Ser Gly Lys Arg Phe Arg Asp Glu Ser Ser Val Asn Cys Ala
1               5                   10                  15

Asn Asn Phe Ala Asn Glu Ser Asp Ser Ser Asp Asp Ile Cys Cys Val
            20                  25                  30

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

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

Trp Glu Tyr Thr Met Ser Pro Gly Ile Lys Glu Ala Ala Leu Cys Gln
65                  70                  75                  80
```

```
Leu Gly Gly Gly Arg Arg Glu Phe Asp Ile Phe Asn Leu Ile Phe Asp
                85                  90                  95

Asp Ile Phe Trp Asn Asn Ile Val Thr Glu Thr Ser Gln Tyr Ala Asp
            100                 105                 110

Gln Ile Arg Ala Asn Pro His Ser Ser Arg Glu Ile Asp Glu Thr Trp
        115                 120                 125

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

Ile Met Ala Gln Val Lys Lys Pro Arg Ile Gln Met Asn Trp Ser Lys
145                 150                 155                 160

Arg Ala Val Ile Glu Thr Leu Ile Phe Arg Lys Ser Met Pro Leu Lys
                165                 170                 175

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

Val Ala Asn Thr Asp Lys Leu Ser Lys Ile Lys Ser Val Ile Asn Phe
        195                 200                 205

Leu Asn Gln Lys Phe Lys Glu Val Tyr Ile Met Lys Glu Asp Ile Ala
    210                 215                 220

Ile Asp Glu Ser Leu Met Lys Phe Lys Gly Arg Leu Ser Tyr Lys Gln
225                 230                 235                 240

Phe Asn Pro Ser Lys Arg Thr Arg Phe Gly Val Lys Phe Tyr Lys Leu
                245                 250                 255

Cys Glu Ser Asp Ser Gly Tyr Cys Tyr Glu Phe Lys Ile Tyr Thr Gly
            260                 265                 270
```

```
His Asp Lys Thr Asn Tyr Asp Asp Ser Ala Ser Glu Ser Val Val Lys
        275                 280                 285

Glu Leu Ser Glu Ser Val Leu His Arg Gly His Thr Leu Tyr Ile Asp
    290                 295                 300

Asn Trp Tyr Ser Ser Pro Arg Leu Phe Met Thr Leu Ser His Lys Tyr
305                 310                 315                 320

Lys Thr Asn Val Ile Gly Thr Val Arg Gly Asn Arg Lys His Met Pro
                325                 330                 335

Lys Asp Leu Cys Asn Val Lys Leu Lys Arg Gly Glu Tyr Thr Ile Arg
            340                 345                 350

Ser Cys Asn Arg Ile Leu Ala Ile Lys Trp Lys Asp Lys Arg Asp Val
        355                 360                 365

Tyr Ile Met Ser Thr Lys His Glu Thr Val Glu Met Thr Ala Gln Arg
    370                 375                 380

Tyr Tyr Arg Thr Pro Lys Pro Asn Cys Ile Leu Glu Tyr Asn Lys Gly
385                 390                 395                 400

Met Ile Arg Ile Asp Leu Gln Asp Gln Ile Leu Ala Cys Phe Pro Val
                405                 410                 415

Met Arg Lys Tyr Met Lys Gly Tyr Lys Lys Ile Phe Phe Tyr Leu Phe
            420                 425                 430

Gly Ile Asp Leu Phe Asn Ser Tyr Ile Leu Trp Lys Lys Ile Asn Lys
        435                 440                 445

Glu Lys Lys Gln Cys Tyr Ile Asp Tyr Arg Ile Asn Ile Ala Glu Ser
    450                 455                 460

Leu Leu Lys Asn Met Pro Lys Pro Asn Tyr Arg Glu Arg Gly Gly Leu
465                 470                 475                 480
```

Ser Phe Gly Asp Ala Pro Glu Arg Leu His Ala Lys His Trp Ala His
485 490 495

Phe Pro Lys His Ile Asp Pro Thr Ala Ser Lys Leu Arg Pro Ser Lys
500 505 510

Pro Cys Arg Val Cys Gln Lys Asn Lys Lys Arg Ser Glu Thr Thr Trp
515 520 525

Gly Cys Lys Lys Cys Lys Val Pro Leu His Leu Pro Ile Phe Thr Ser
530 535 540

Thr Arg Met Leu Arg Ile Ile Ser His His Cys Arg Leu Leu Ile Leu
545 550 555 560

Tyr Tyr Cys Phe Leu Tyr Lys
565

<210> 40
<211> 581
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 40

Met Ser Leu Ala Arg Phe Leu Ala Glu Glu Ala Leu Ser Gln Leu Met
1 5 10 15

Asn Trp Asp Ser Asp Val Glu Glu Asp Ile Ser Glu Thr Glu Asp Ala
20 25 30

Ser Glu Pro Glu Asp Tyr Val Ile Asp Asp Pro Gly Cys Gln Phe Ser
35 40 45

Leu Asp Asp Glu Asp Ser Glu Asp Gly Ser Ala Gly Val Pro Ser Ser
50 55 60

```
Asn Glu Asn Gln Glu Met Gln Lys Pro Pro Ser Thr Glu Gly Thr Leu
65                  70                  75                  80

Thr Ser Lys Asp Gly Gln Ile Lys Trp Ser Thr Ser Pro His Gln Thr
                85                  90                  95

Gln Ala Arg Leu Ser Ser Ser Asn Ala Ile Lys Met Thr Pro Gly Pro
            100                 105                 110

Thr Arg Phe Ala Leu Thr Arg Val Asp Gly Ile Glu Ser Ala Phe Gln
        115                 120                 125

Leu Phe Ile Ser Pro Pro Ile Glu Lys Ile Ile Leu Asp Met Thr Asn
    130                 135                 140

Leu Glu Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Pro Leu Asp Pro
145                 150                 155                 160

Ser Asp Leu His Ala Tyr Ile Gly Ile Leu Val Leu Ala Gly Val Tyr
                165                 170                 175

Arg Ser Lys Gly Glu Ala Thr Ala Ser Leu Trp Ser Glu Glu Tyr Gly
            180                 185                 190

Arg Pro Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile
        195                 200                 205

Ser Arg Val Ile Arg Phe Asp Asn Arg Ala Thr Arg Ala Gly Arg Arg
    210                 215                 220

Glu Lys Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val
225                 230                 235                 240

Lys Ile Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Gly
                245                 250                 255
```

```
Glu Arg Leu Ile Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Val
            260                 265                 270

Pro Lys Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp
        275                 280                 285

Ala Lys Ser Ser Tyr Ala Trp Asn Met Gln Val Tyr Thr Gly Lys Pro
    290                 295                 300

Leu Gly Gly Pro Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu
305                 310                 315                 320

Met Thr Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe
                325                 330                 335

Thr Ser Tyr Arg Leu Gly Val Glu Leu Gln Lys Arg Lys Leu Thr Met
            340                 345                 350

Leu Gly Thr Val Arg Lys Asn Lys Pro Glu Leu Pro Cys Glu Ile Leu
        355                 360                 365

Lys Met Gln Gly Arg Pro Leu His Ser Ser Lys Phe Thr Phe Thr Glu
    370                 375                 380

Asn Thr Thr Leu Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu
385                 390                 395                 400

Val Met Ser Thr Met His Lys Asp Ala Ser Leu Ser Thr Arg Glu Asp
                405                 410                 415

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

Asp Asn Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Ser
        435                 440                 445

Thr Arg Trp Pro Leu Val Val Phe Tyr Asn Ile Val Asp Val Ser Ala
    450                 455                 460
```

```
Tyr Asn Ala Tyr Val Leu Trp Thr Glu Ile Asn Gln His Trp Asn Ala
465                 470                 475                 480

Ser Lys Leu Tyr Arg Arg Arg Met Phe Leu Glu Glu Leu Gly Lys Ala
                485                 490                 495

Leu Val Thr Pro Lys Ile Gln Asn Arg Ala Arg Pro Ala Arg Ser Pro
            500                 505                 510

Ala Ala Ala Ala Val Ile Ala Asn Val Gln Val Arg Ala Ser Asp Gln
        515                 520                 525

Pro Thr Met Asp Pro Leu Asp Lys Cys Ala Lys Lys Arg Lys Arg Cys
    530                 535                 540

Gln Val Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val
545                 550                 555                 560

Arg Cys Lys Lys Cys Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro
                565                 570                 575

Ser Cys Gly Glu Asn
            580
```

<210> 41
<211> 3045
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 41

```
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg       60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac      120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg      180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa      240
```

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctcata ttatgttaag ggtcaatttg acccatttca 420

gtttttggtt tgaccaaaga actggttatc ctttcttttt cttcacgaaa gttggtgact 480

tttcctcatc tagggtcatg aacttgtgtg taaaatctgg atactgtgaa gtgtcgtgga 540

atgtctgtga acagtttgta tacaaagatg atgttgcggg tcattttgac ccacacactt 600

tgatgtgagc aagtagctgt ccagatccga aataaacatg tctctttgat gcactttatt 660

ttgattgcta aattatttat attttgactg tctctgaata gaccttcaga tcagagaccc 720

aggtgtgtgt gggggaggag ctttctctcc cttgtccttg tcactgttct cgtgtcatct 780

ctttgagaaa cagcaaaagt ttagcttgcc tcgtccccgc cgggtcaccc ggccagcgac 840

atggaggccc agaataccct ccttgacagt cttgacgtgc gcagctcagg ggcatgatgt 900

gactgtcgcc cgtacattta gcccatacat ccccatgtat aatcatttgc atccatacat 960

tttgatggcc gcacggcgcg aagcaaaaat tacggctcct cgctgcagac cagcgagcag 1020

ggaaacgctc ccctcacaga cgcgttgaat tgtccccacg ccgcgcccct gtagagaaat 1080

ataaaaggtt aggatttgcc actgaggttc ttctttcata tacttccttt taaaatcttg 1140

ctaggataca gttctcacat cacatccgaa cataaacaac aatgtctgtt attaatttca 1200

caggtagttc tggtccattg gtgaaagttt gcggcttgca gagcacagag gccgcagaat 1260

gtgctctaga ttccgatgct gacttgctgg gtattatatg tgtgcccaat agaaagagaa 1320

caattgaccc ggttattgca aggaaaattt caagtcttgt aaaagcatat aaaaatagtt 1380

caggcactcc gaaatacttg gttggcgtgt ttcgtaatca acctaaggag gatgttttgg 1440

ctctggtcaa tgattacggc attgatatcg tccaactgca tggagatgag tcgtggcaag 1500

aataccaaga gttcctcggt ttgccagtta ttaaaagact cgtatttcca aaagactgca 1560

acatactact cagtgcagct tcacagaaac ctcattcgtt tattcccttg tttgattcag 1620

aagccggtgg gacaggtgaa cttttggatt ggaactcgat ttctgactgg gttggaaggc 1680

aagagagccc cgaaagctta cattttatgt tagctggtgg actgacgcca gaaaatgttg 1740

gtgatgcgct tagattaaat ggcgttattg gtgttgatgt aagcggaggt gtggagacaa 1800

atggtgtaaa agactctaac aaaatagcaa atttcgtcaa aaatgctaag aaatagtcag 1860

tactgacaat aaaaagattc ttgttttcaa gaacttgtca tttgtatagt ttttttatat 1920

tgtagttgtt ctattttaat caaatgttag cgtgatttat atttttttc gcctcgacat 1980

catctgccca gatgcgaagt taagtgcgca gaaagtaata tcatgcgtca atcgtatgtg 2040

aatgctggtc gctatactgc tgtcgattcg atactaacgc cgccatccag tgtcgaaacg 2100

ctatgatcca atatcaaagg aagatactga atattgaaaa tctcagaaaa tgtgacaagt 2160

taaattacaa aaaaaaagtg tttgtgaagg aaaaaaatat taaatatagt gttggaataa 2220

aaaaatagta ttgtttgtct ctttcctaaa tgttgaaata ttctaaaata aagttgatat 2280

cagtttaacc tgtttttta ttgttttgag tggatttaca cagtatgggt caaaatgacc 2340

cgcaacataa tcaaggtaat ttttttcaa cataatacga gggttaagcc gctaaaggca 2400

ttatccgcca agtacaattt tttactcttc gaagatagaa aatttgctga cattggtaat 2460

acagtcaaat tgcagtactc tgcgggtgta tacagaatag cagaatgggc agacattacg 2520

aatgcacacg gtgtggtggg cccaggtatt gttagcggtt tgaagcaggc ggcagaagaa 2580

gtaacaaagg aacctagagg ccttttgatg ttagcagaat tgtcatgcaa gggctcccta 2640

tctactggag aatatactaa gggtactgtt gacattgcga aaagcgacaa agattttgtt 2700

atcggcttta ttgctcaaag agacatgggt ggaagagatg aaggttacga ttggttgatt 2760

atgacacccg gtgtgggttt agatgacaag ggagatgcat tgggtcaaca gtatagaacc 2820

gtggatgatg ttgtctctac aggatctgac attattattg ttggaagagg actatttgca 2880

aagggaaggg atgctaaggt agagggtgaa cgttacagaa aagcaggctg ggaagcatat 2940

ttgagaagat gcggccagca aaactaaaaa actgtattat aagtaaatgc atgtatacta 3000

aactcacaaa ttagagcttc aatttaatta tatcagttat taccc 3045

<210> 42
<211> 1945
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 42
cagctgcttc atccccgtgg cccgttgctc gcgtttgctg gcggtgtccc cggaagaaat 60

atatttgcat gtctttagtt ctatgatgac acaaaccccg cccagcgtct tgtcattggc 120

gaaaacacgc agatgcagtc ggggcggcgc ggtcccaggt ccacttcgca tattaaggtg 180

acgcgtgtgg cctcgaacac agagcgactc tgcagggtgg catggccacc tcagcaagtt 240

cccacttgaa caaaaacatc aagcaaatgt acctgtgcct gccccagggt gagaaagtcc 300

aagccatgta tatctgggtt gatggtactg gagaaggact gcgctgcaaa acccgcaccc 360

tggactgtga gcccaagtgt gtagaagagt tacctgagtg gaattttgat ggctctagta 420

cctttcagtc tgagggctcc aacagtgaca tgtatctcag ccctgttgcc atgtttcggg 480

acccttccg ccgggagccc aacaagctgg tgttctgtga agttttcaag tacaaccgga 540

agcctgcaga gacaaattta aggcactcct gtaaacggat aatggacatg gtgagcaacc 600

agcacccctg gtttggaatg gaacaggagt atactctgat gggaacagat gggcaccctt 660

ttggttggcc ttccaatggc tttcctgggc cccaaggtcc gtattactgt ggtgtgggcg 720

cagacaaagc ctatggcagg gatatcgtgg aggctcacta ccgcgcctgc ttgtatgctg 780

gggtcaagat tacaggaaca aatgctgagg tcatgcctgc ccagtgggag ttccaaatag 840

gaccctgtga aggaatccac atgggagatc atctctgggt ggcccgtttc atcttgcatc 900

gagtatgtga ggactttggg gtaatagcaa cctttgaccc caagcccatt cctgggaact 960

ggaatggtgc aggctgccat accaacttta gcaccaaggc catgcgggag gagaatggtc 1020

tgaagcacat cgaggaggcc atcgagaaac taagcaagcg gcaccagtac cacattcgag 1080

cctacgatcc caaggggggc ctggacaatg cccgtcgtct gactgggttc cacgaaacgt 1140

ccaacatcaa cgacttttct gctggtgtcg ccaatcgcag tgccagcatc cgcattcccc 1200

ggactgtcgg ccaggagaag aaaggttact ttgaagatcg ccgcccctct gccaattgtg 1260

acccctttgc agtgacagaa gccatcgtcc gcacatgcct tctcaatgag actggcgacg 1320

agcccttcca atacaaaaac tggatccgct cagacatgat aagatacatt gatgagtttg 1380

gacaaaccac aactagaatg cagtgataat tagactttga gtgatcttga gcctttccta 1440

gttcatccca ccccgcccca gagagatctt tgtgaaggaa ccttacttct gtggtgtgac 1500

ataattggac aaactaccta cagagattta aagctctaag gtaaatataa aatttttaag 1560

tgtataatgt gttaaactac tgattctaat tgtttgtgta ttttagattc caacctatgg 1620

aactgatgaa tgggagcagt ggtggaatgc ctttaatgag gaaaacctgt tttgctcaga 1680

agaaatgcca tctagtgatg atgaggctac tgctgactct caacattcta ctcctctcgc 1740

tttcttgctg tccaatttct attaaaggtt cctttgttcc ctaagtccaa ctactaaact 1800

gggggatatt atgaagggcc ttgagcatct ggattctgcc taataaaaaa catttatttt 1860

cattgcaatg atgtatttaa attatttctg aatattttac taaaaaggga atgtgggagg 1920

tcagtgcatt taaaacataa agaaa 1945

<210> 43
<211> 2507
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 43
ttaaccctca tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccacacac tttgatgtga gcaagtagct 240

gtccagatcc gaaataaaca tgtctctttg atgcacttta ttttagagta gtcttccagc 300

tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg tgtccccgga agaaatatat 360

ttgcatgtct ttagttctat gatgacacaa accccgccca gcgtcttgtc attggcgaaa 420

acacgcagat gcagtcgggg cggcgcggtc ccaggtccac ttcgcatatt aaggtgacgc 480

gtgtggcctc gaacacagag cgactctgca gggtggcatg gccacctcag caagttccca 540

cttgaacaaa aacatcaagc aaatgtacct gtgcctgccc cagggtgaga aagtccaagc 600

catgtatatc tgggttgatg gtactggaga aggactgcgc tgcaaaaccc gcaccctgga 660

ctgtgagccc aagtgtgtag aagagttacc tgagtggaat tttgatggct ctagtacctt 720

tcagtctgag ggctccaaca gtgacatgta tctcagccct gttgccatgt ttcgggaccc 780

cttccgccgg gagcccaaca agctggtgtt ctgtgaagtt ttcaagtaca accggaagcc 840

tgcagagaca aatttaaggc actcctgtaa acggataatg gacatggtga gcaaccagca 900

cccctggttt ggaatggaac aggagtatac tctgatggga acagatgggc acccttttgg 960

ttggccttcc aatggctttc ctgggcccca aggtccgtat tactgtggtg tgggcgcaga 1020

caaagcctat ggcagggata tcgtggaggc tcactaccgc gcctgcttgt atgctggggt 1080

caagattaca ggaacaaatg ctgaggtcat gcctgcccag tgggagttcc aaataggacc 1140

ctgtgaagga atccacatgg gagatcatct ctgggtggcc cgtttcatct tgcatcgagt 1200

atgtgaggac tttggggtaa tagcaacctt tgaccccaag cccattcctg ggaactggaa 1260

tggtgcaggc tgccatacca actttagcac caaggccatg cgggaggaga atggtctgaa 1320

gcacatcgag gaggccatcg agaaactaag caagcggcac cagtaccaca ttcgagccta 1380

cgatcccaag gggggcctgg acaatgcccg tcgtctgact gggttccacg aaacgtccaa 1440

catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc agcatccgca ttccccggac 1500

tgtcggccag gagaagaaag gttactttga agatcgccgc ccctctgcca attgtgaccc 1560

ctttgcagtg acagaagcca tcgtccgcac atgccttctc aatgagactg gcgacgagcc 1620

cttccaatac aaaaactgga tccgctcaga catgataaga tacattgatg agtttggaca 1680

aaccacaact agaatgcagt gataattaga ctttgagtga tcttgagcct ttcctagttc 1740

atcccacccc gccccagaga gatctttgtg aaggaacctt acttctgtgg tgtgacataa 1800

ttggacaaac tacctacaga gatttaaagc tctaaggtaa atataaaatt tttaagtgta 1860

taatgtgtta aactactgat tctaattgtt tgtgtatttt agattccaac ctatggaact 1920

gatgaatggg agcagtggtg gaatgccttt aatgaggaaa acctgttttg ctcagaagaa 1980

atgccatcta gtgatgatga ggctactgct gactctcaac attctactcc tctcgctttc 2040

ttgctgtcca atttctatta aaggttcctt tgttccctaa gtccaactac taaactgggg 2100

gatattatga agggccttga gcatctggat tctgcctaat aaaaaacatt tattttcatt 2160

gcaatgatgt atttaaatta tttctgaata ttttactaaa aagggaatgt gggaggtcag 2220

tgcatttaaa acataaagaa aagatactga atattgaaaa tctcagaaaa tgtgacaagt 2280

taaattacaa aaaaaaagtg tttgtgaagg aaaaaaatat taaatatagt gttggaataa 2340

aaaaatagta ttgtttgtct ctttcctaaa tgttgaaata ttctaaaata aagttgatat 2400

cagtttaacc tgtttttta ttgttttgag tggatttaca cagtatgggt caaaatgacc 2460

cgcaacataa tcaaggtaat ttttttcaa cataatacga gggttaa 2507

<210> 44
<211> 2438
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 44
ttaaccctca tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccaagagt agtcttccag ctgcttcatc 240

cccgtggccc gttgctcgcg tttgctggcg gtgtccccgg aagaaatata tttgcatgtc 300

tttagttcta tgatgacaca aaccccgccc agcgtcttgt cattggcgaa aacacgcaga 360

tgcagtcggg gcggcgcggt cccaggtcca cttcgcatat taaggtgacg cgtgtggcct 420

cgaacacaga gcgactctgc agggtggcat ggccacctca gcaagttccc acttgaacaa 480

aaacatcaag caaatgtacc tgtgcctgcc ccagggtgag aaagtccaag ccatgtatat 540

ctgggttgat ggtactggag aaggactgcg ctgcaaaacc cgcaccctgg actgtgagcc 600

caagtgtgta gaagagttac ctgagtggaa ttttgatggc tctagtacct ttcagtctga 660

gggctccaac agtgacatgt atctcagccc tgttgccatg tttcgggacc ccttccgccg 720

ggagcccaac aagctggtgt tctgtgaagt tttcaagtac aaccggaagc ctgcagagac 780

aaatttaagg cactcctgta aacggataat ggacatggtg agcaaccagc acccctggtt 840

tggaatggaa caggagtata ctctgatggg aacagatggg cacccttttg gttggccttc 900

caatggcttt cctgggcccc aaggtccgta ttactgtggt gtgggcgcag acaaagccta 960

tggcagggat atcgtggagg ctcactaccg cgcctgcttg tatgctgggg tcaagattac 1020

aggaacaaat gctgaggtca tgcctgccca gtgggagttc caaataggac cctgtgaagg 1080

aatccacatg ggagatcatc tctgggtggc ccgtttcatc ttgcatcgag tatgtgagga 1140

ctttggggta atagcaacct ttgaccccaa gcccattcct gggaactgga atggtgcagg 1200

ctgccatacc aactttagca ccaaggccat gcgggaggag aatggtctga agcacatcga 1260

ggaggccatc gagaaactaa gcaagcggca ccagtaccac attcgagcct acgatcccaa 1320

gggggggcctg gacaatgccc gtcgtctgac tgggttccac gaaacgtcca acatcaacga 1380

cttttctgct ggtgtcgcca atcgcagtgc cagcatccgc attccccgga ctgtcggcca 1440

ggagaagaaa ggttactttg aagatcgccg cccctctgcc aattgtgacc cctttgcagt 1500

gacagaagcc atcgtccgca catgccttct caatgagact ggcgacgagc ccttccaata 1560

caaaaactgg atccgctcag acatgataag atacattgat gagtttggac aaaccacaac 1620

tagaatgcag tgataattag actttgagtg atcttgagcc tttcctagtt catcccaccc 1680

cgccccagag agatctttgt gaaggaacct tacttctgtg gtgtgacata attggacaaa 1740

ctacctacag agatttaaag ctctaaggta aatataaaat ttttaagtgt ataatgtgtt 1800

aaactactga ttctaattgt ttgtgtattt tagattccaa cctatggaac tgatgaatgg 1860

gagcagtggt ggaatgcctt taatgaggaa aacctgtttt gctcagaaga aatgccatct 1920

agtgatgatg aggctactgc tgactctcaa cattctactc ctctcgcttt cttgctgtcc 1980

aatttctatt aaaggttcct ttgttcccta agtccaacta ctaaactggg ggatattatg 2040

aagggccttg agcatctgga ttctgcctaa taaaaaacat ttattttcat tgcaatgatg 2100

tatttaaatt atttctgaat attttactaa aaagggaatg tgggaggtca gtgcatttaa 2160

aacataaaga aaagatactg aatattgaaa atctcagaaa atgtgacaag ttaaattaca 2220

aaaaaaaagt gtttgtgaag gaaaaaaata ttaaatatag tgttggaata aaaaaatagt 2280

attgtttgtc tctttcctaa atgttgaaat attctaaaat aaagttgata tcagtttaac 2340

ctgtttttt attgttttga gtggatttac acagtatggg tcaaaatgac ccgcaacata 2400

atcaaggtaa ttttttttca acataatacg agggttaa 2438

<210> 45
<211> 2500
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 45
ttaaccctca tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccacacac tttgatgtga gcaagtagct 240

gtccagatcc gaaataaaca tgtctctttg atgcacttta ttttgattgc taaattattt 300

atattttgac tgtctctgaa tagaccttca gatcagagac tcaggtgtgt gtgggggagg 360

agctttctct cccttgtcct tgtcactgtt ctcgtgtcat ctctttgaga aacagcaaaa 420

agagtagtct tccagctgct tcatccccgt ggcccgttgc tcgcgtttgc tggcggtgtc 480

cccggaagaa atatatttgc atgtctttag ttctatgatg acacaaaccc cgcccagcgt 540

cttgtcattg gcgaaaacac gcagatgcag tcggggcggc gcggtcccag gtccacttcg 600

catattaagg tgacgcgtgt ggcctcgaac acagagcgac tctgcagggt ggcatggcca 660

cctcagcaag ttcccacttg aacaaaaaca tcaagcaaat gtacctgtgc ctgccccagg 720

gtgagaaagt ccaagccatg tatatctggg ttgatggtac tggagaagga ctgcgctgca 780

aaacccgcac cctggactgt gagcccaagt gtgtagaaga gttacctgag tggaattttg 840

atggctctag tacctttcag tctgagggct ccaacagtga catgtatctc agccctgttg 900

ccatgtttcg ggaccccttc cgccgggagc ccaacaagct ggtgttctgt gaagttttca 960

agtacaaccg gaagcctgca gagacaaatt taaggcactc ctgtaaacgg ataatggaca 1020

tggtgagcaa ccagcacccc tggtttggaa tggaacagga gtatactctg atgggaacag 1080

atgggcaccc ttttggttgg ccttccaatg gctttcctgg gccccaaggt ccgtattact 1140

gtggtgtggg cgcagacaaa gcctatggca gggatatcgt ggaggctcac taccgcgcct 1200

gcttgtatgc tggggtcaag attacaggaa caaatgctga ggtcatgcct gcccagtggg 1260

agttccaaat aggaccctgt gaaggaatcc acatgggaga tcatctctgg gtggcccgtt 1320

tcatcttgca tcgagtatgt gaggactttg gggtaatagc aacctttgac cccaagccca 1380

ttcctgggaa ctggaatggt gcaggctgcc ataccaactt tagcaccaag gccatgcggg 1440

aggagaatgg tctgaagcac atcgaggagg ccatcgagaa actaagcaag cggcaccagt 1500

accacattcg agcctacgat cccaaggggg gcctggacaa tgcccgtcgt ctgactgggt 1560

tccacgaaac gtccaacatc aacgactttt ctgctggtgt cgccaatcgc agtgccagca 1620

tccgcattcc ccggactgtc ggccaggaga agaaaggtta ctttgaagat cgccgcccct 1680

ctgccaattg tgacccctttt gcagtgacag aagccatcgt ccgcacatgc cttctcaatg 1740

agactggcga cgagcccttc caatacaaaa actggatccg ctcagacatg ataagataca 1800

ttgatgagtt tggacaaacc acaactagaa tgcagtgata attagacttt gagtgatctt 1860

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1920

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1980

aaaattttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 2040

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 2100

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 2160

tactcctctc gctttcttgc tgtccaattt ctattaaagg ttcctttgtt ccctaagtcc 2220

aactactaaa ctgggggata ttatgaaggg ccttgagcat ctggattctg cctaataaaa 2280

aacatttatt ttcattgcaa tgatgtattt aaattatttc tgaatatttt actaaaaagg 2340

gaatgtggga ggtcagtgca tttaaaacat aaagaaaaaa ataaagttga tatcagttta 2400

acctgttttt ttattgtttt gagtggattt acacagtatg ggtcaaaatg acccgcaaca 2460

taatcaaggt aatttttttt caacataata cgagggttaa 2500

<210> 46
<211> 2472
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 46
ttaaccctca tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccacacac tttgatgtga gcaagtagct 240

gtccagatcc gaaataaaca tgtctctttg atgcacttta ttttgattgc taaattattt 300

atattttgac tgtctctgaa tagaccttca gatcagagac tcaggtgtgt gtgggggagg 360

agctttctct cccttgtcct tgtcactgtt ctcgtgtcat ctctttgaga aacagcaaaa 420

agagtagtct tccagctgct tcatccccgt ggcccgttgc tcgcgtttgc tggcggtgtc 480

cccggaagaa atatatttgc atgtctttag ttctatgatg acacaaaccc cgcccagcgt 540

cttgtcattg gcgaaaacac gcagatgcag tcggggcggc gcggtcccag gtccacttcg 600

catattaagg tgacgcgtgt ggcctcgaac acagagcgac tctgcagggt ggcatggcca 660

cctcagcaag ttcccacttg aacaaaaaca tcaagcaaat gtacctgtgc ctgccccagg 720

gtgagaaagt ccaagccatg tatatctggg ttgatggtac tggagaagga ctgcgctgca 780

aaacccgcac cctggactgt gagcccaagt gtgtagaaga gttacctgag tggaattttg 840

atggctctag tacctttcag tctgagggct ccaacagtga catgtatctc agccctgttg 900

ccatgtttcg ggacccttc cgccgggagc ccaacaagct ggtgttctgt gaagttttca 960

agtacaaccg gaagcctgca gagacaaatt taaggcactc ctgtaaacgg ataatggaca 1020

tggtgagcaa ccagcacccc tggtttggaa tggaacagga gtatactctg atgggaacag 1080

atgggcaccc ttttggttgg ccttccaatg gctttcctgg gccccaaggt ccgtattact 1140

gtggtgtggg cgcagacaaa gcctatggca gggatatcgt ggaggctcac taccgcgcct 1200

gcttgtatgc tggggtcaag attacaggaa caaatgctga ggtcatgcct gcccagtggg 1260

agttccaaat aggaccctgt gaaggaatcc acatgggaga tcatctctgg gtggcccgtt 1320

tcatcttgca tcgagtatgt gaggactttg gggtaatagc aacctttgac cccaagccca 1380

ttcctgggaa ctggaatggt gcaggctgcc ataccaactt tagcaccaag gccatgcggg 1440

aggagaatgg tctgaagcac atcgaggagg ccatcgagaa actaagcaag cggcaccagt 1500

accacattcg agcctacgat cccaaggggg gcctggacaa tgcccgtcgt ctgactgggt 1560

tccacgaaac gtccaacatc aacgactttt ctgctggtgt cgccaatcgc agtgccagca 1620

tccgcattcc ccggactgtc ggccaggaga agaaaggtta ctttgaagat cgccgcccct 1680

ctgccaattg tgacccctttt gcagtgacag aagccatcgt ccgcacatgc cttctcaatg 1740

agactggcga cgagcccttc caatacaaaa actggatccg ctcagacatg ataagataca 1800

ttgatgagtt tggacaaacc acaactagaa tgcagtgata attagacttt gagtgatctt 1860

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1920

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1980

aaaattttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 2040

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 2100

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 2160

tactcctctc gctttcttgc tgtccaattt ctattaaagg ttcctttgtt ccctaagtcc 2220

aactactaaa ctgggggata ttatgaaggg ccttgagcat ctggattctg cctaataaaa 2280

aacatttatt ttcattgcaa tgatgtattt aaattatttc tgaatatttt actaaaaagg 2340

gaatgtggga ggtcagtgca tttaaaacat aaagaaattt ttttattgtt ttgagtggat 2400

ttacacagta tgggtcaaaa tgacccgcaa cataatcaag gtaatttttt ttcaacataa 2460

tacgagggtt aa 2472

<210> 47
<211> 2440
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 47
ttaaccctca tattatgtta agggtcaatt tgacccattt cagtttttgg tttgaccaaa 60

gaactggtta tcctttcttt ttcttcacga aagttggtga cttttcctca tctagggtca 120

tgaacttgtg tgtaaaatct ggatactgtg aagtgtcgtg gaatgtctgt gaacagtttg 180

tatacaaaga tgatgttgcg ggtcattttg acccacacac tttgatgtga gcaagtagct 240

gtccagatcc gaaataaaca tgtctctttg atgcacttta ttttgattgc taaattattt 300

atattttgac tgtctctgaa tagaccttca gatcagagac tcaggtgtgt gtgggggagg 360

agctttctct cccttgtcct tgtcactgtt ctcgtgtcat ctctttgaga aacagcaaaa 420

agagtagtct tccagctgct tcatccccgt ggcccgttgc tcgcgtttgc tggcggtgtc 480

cccggaagaa atatatttgc atgtctttag ttctatgatg acacaaaccc cgcccagcgt 540

cttgtcattg gcgaaaacac gcagatgcag tcggggcggc gcggtcccag gtccacttcg 600

catattaagg tgacgcgtgt ggcctcgaac acagagcgac tctgcagggt ggcatggcca 660

cctcagcaag ttcccacttg aacaaaaaca tcaagcaaat gtacctgtgc ctgccccagg 720

gtgagaaagt ccaagccatg tatatctggg ttgatggtac tggagaagga ctgcgctgca 780

aaacccgcac cctggactgt gagcccaagt gtgtagaaga gttacctgag tggaattttg 840

atggctctag tacctttcag tctgagggct ccaacagtga catgtatctc agccctgttg 900

ccatgtttcg ggacccttc cgccgggagc ccaacaagct ggtgttctgt gaagttttca 960

agtacaaccg gaagcctgca gagacaaatt taaggcactc ctgtaaacgg ataatggaca 1020

tggtgagcaa ccagcacccc tggtttggaa tggaacagga gtatactctg atgggaacag 1080

atgggcaccc ttttggttgg ccttccaatg gctttcctgg gccccaaggt ccgtattact 1140

gtggtgtggg cgcagacaaa gcctatggca gggatatcgt ggaggctcac taccgcgcct 1200

gcttgtatgc tggggtcaag attacaggaa caaatgctga ggtcatgcct gcccagtggg 1260

agttccaaat aggaccctgt gaaggaatcc acatgggaga tcatctctgg gtggcccgtt 1320

tcatcttgca tcgagtatgt gaggactttg gggtaatagc aacctttgac cccaagccca 1380

ttcctgggaa ctggaatggt gcaggctgcc ataccaactt tagcaccaag gccatgcggg 1440

aggagaatgg tctgaagcac atcgaggagg ccatcgagaa actaagcaag cggcaccagt 1500

accacattcg agcctacgat cccaaggggg gcctggacaa tgcccgtcgt ctgactgggt 1560

tccacgaaac gtccaacatc aacgactttt ctgctggtgt cgccaatcgc agtgccagca 1620

tccgcattcc ccggactgtc ggccaggaga agaaaggtta ctttgaagat cgccgcccct 1680

ctgccaattg tgacccctttt gcagtgacag aagccatcgt ccgcacatgc cttctcaatg 1740

agactggcga cgagcccttc caatacaaaa actggatccg ctcagacatg ataagataca 1800

ttgatgagtt tggacaaacc acaactagaa tgcagtgata attagacttt gagtgatctt 1860

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1920

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1980

aaaattttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 2040

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 2100

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 2160

tactcctctc gctttcttgc tgtccaattt ctattaaagg ttcctttgtt ccctaagtcc 2220

aactactaaa ctgggggata ttatgaaggg ccttgagcat ctggattctg cctaataaaa 2280

aacatttatt ttcattgcaa tgatgtattt aaattatttc tgaatatttt actaaaaagg 2340

gaatgtggga ggtcagtgca tttaaaacat aaagaaaatg ggtcaaaatg acccgcaaca 2400

taatcaaggt aatttttttt caacataata cgagggttaa 2440

<210> 48
<211> 3319
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 48
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccgtctgc agctgacgtg tagtcccaca gacaccgcga 420

aatacaaaat cacgtgttat accgtcattt ttcaaatatg agcgtcactg ctgcgagtac 480

cttactgtat agtgctcgcg cgtcggtcag tgtgcggcgg ggggtcgcag cgagcgcacg 540

tgtgcgtagc ggagggaagg tgtccacgag actaccacgt cagcgttaag gtaagtgtcc 600

acgagattac cacttcagtg aaatggttat atcttcatag tgtctcctaa acaaccacgt 660

cagtcattga gtttcaatga tttattattt tatgttattt tccaattttc ataaactatt 720

tatactacta ttttattact acttatacta cttacaatta ggacagattt ctacttttgt 780

ttgtaatcaa ttaacttgaa tacaaagccg tttatttaac atacaaacaa cataacaata 840

cataataatg ttatctctga gtaacacagg ttacaggaaa caatatctat acagcacccg 900

cgtgtgctta agtcgtgcta gaaaactaac agtatttaac ttgtttttag gtttagcttg 960

cctcgtcccc gccgggtcac ccggccagcg acatggaggc ccagaatacc ctccttgaca 1020

gtcttgacgt gcgcagctca ggggcatgat gtgactgtcg cccgtacatt tagcccatac 1080

atccccatgt ataatcattt gcatccatac attttgatgg ccgcacggcg cgaagcaaaa 1140

attacggctc ctcgctgcag accagcgagc agggaaacgc tcccctcaca gacgcgttga 1200

attgtcccca cgccgcgccc ctgtagagaa atataaaagg ttaggatttg ccactgaggt 1260

tcttctttca tatacttcct tttaaaatct tgctaggata cagttctcac atcacatccg 1320

aacataaaca acaatgtctg ttattaattt cacaggtagt tctggtccat tggtgaaagt 1380

ttgcggcttg cagagcacag aggccgcaga atgtgctcta gattccgatg ctgacttgct 1440

gggtattata tgtgtgccca atagaaagag aacaattgac ccggttattg caaggaaaat 1500

ttcaagtctt gtaaaagcat ataaaaatag ttcaggcact ccgaaatact tggttggcgt 1560

gtttcgtaat caacctaagg aggatgtttt ggctctggtc aatgattacg gcattgatat 1620

cgtccaactg catggagatg agtcgtggca agaataccaa gagttcctcg gtttgccagt 1680

tattaaaaga ctcgtatttc caaaagactg caacatacta ctcagtgcag cttcacagaa 1740

acctcattcg tttattccct tgtttgattc agaagccggt gggacaggtg aacttttgga 1800

ttggaactcg atttctgact gggttggaag gcaagagagc cccgaaagct tacattttat 1860

gttagctggt ggactgacgc cagaaaatgt tggtgatgcg cttagattaa atggcgttat 1920

tggtgttgat gtaagcggag gtgtggagac aaatggtgta aaagactcta acaaaatagc 1980

aaatttcgtc aaaaatgcta agaaatagtc agtactgaca ataaaaagat tcttgttttc 2040

aagaacttgt catttgtata gttttttttat attgtagttg ttctatttta atcaaatgtt 2100

agcgtgattt atatttttt tcgcctcgac atcatctgcc cagatgcgaa gttaagtgcg 2160

cagaaagtaa tatcatgcgt caatcgtatg tgaatgctgg tcgctatact gctgtcgatt 2220

cgatactaac gccgccatcc agtgtcgaaa cgctatgatc caatatcaaa ggattttgaa 2280

actctctagt ttttaagttg accaacgaat gtatctcaat tttcctagac tgattaatgt 2340

tattgtgaac ttttaaaatg tataatgtga aatttgaaaa atttgatttt gttatttttt 2400

tatgtcataa atgtttaaga agaaatttat agactgattt gtgttaagta aataaacctt 2460

gtttaatttt gaaaatagat attgtttttt tttttatttc aattaaatat aaaatataaa 2520

aaggcaagaa atctaacaaa catgaataaa ttagctgcat attttaattc taaaaaaata 2580

tttgctgttg aaatggtgtc tggtatacta ccacctcagt tgaattgtaa caatttaacc 2640

acgtcagttg cagagggtta agccgctaaa ggcattatcc gccaagtaca atttttttact 2700

cttcgaagat agaaaatttg ctgacattgg taatacagtc aaattgcagt actctgcggg 2760

tgtatacaga atagcagaat gggcagacat tacgaatgca cacggtgtgg tgggcccagg 2820

tattgttagc ggtttgaagc aggcggcaga agaagtaaca aaggaaccta gaggcctttt 2880

gatgttagca gaattgtcat gcaagggctc cctatctact ggagaatata ctaagggtac 2940

tgttgacatt gcgaaaagcg acaaagattt tgttatcggc tttattgctc aaagagacat 3000

gggtggaaga gatgaaggtt acgattggtt gattatgaca cccggtgtgg gtttagatga 3060

caagggagat gcattgggtc aacagtatag aaccgtggat gatgttgtct ctacaggatc 3120

tgacattatt attgttggaa gaggactatt tgcaaaggga agggatgcta aggtagaggg 3180

tgaacgttac agaaaagcag gctgggaagc atatttgaga agatgcggcc agcaaaacta 3240

aaaaactgta ttataagtaa atgcatgtat actaaactca caaattagag cttcaattta 3300

attatatcag ttattaccc 3319

<210> 49
<211> 2957
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 49
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacccttaat tggtcgcgtg gggtgtcata caccccagag 420

cgggttccca ggcgcacaac tttttaaaat ttgaatttag cgcgctgctc ttctaggtag 480

cttcgtaaac acgtaaaacg tacatgattc agttgcgagc ggcgctcggt tgtggacggt 540

tgagctcaga gagtgtgttt ggggtgcacg acaccccagg tgactgtttg tgtggtctaa 600

attccgagta agtaaatagt tgttaatttt attatttccg ttttaaaaca ttgtattttg 660

caagtgatga atgttaaaag tgttcaatta taataatttg acatttttga ggttatgttg 720

tgatattttt gtttttggtt ttcagtaaaa tcaaaagttt agcttgcctc gtccccgccg 780

ggtcacccgg ccagcgacat ggaggcccag aataccctcc ttgacagtct tgacgtgcgc 840

agctcagggg catgatgtga ctgtcgcccg tacatttagc ccatacatcc ccatgtataa 900

tcatttgcat ccatacattt tgatggccgc acggcgcgaa gcaaaaatta cggctcctcg 960

ctgcagacca gcgagcaggg aaacgctccc ctcacagacg cgttgaattg tccccacgcc 1020

gcgcccctgt agagaaatat aaaaggttag gatttgccac tgaggttctt ctttcatata 1080

cttcctttta aaatcttgct aggatacagt tctcacatca catccgaaca taaacaacaa 1140

tgtctgttat taatttcaca ggtagttctg gtccattggt gaaagtttgc ggcttgcaga 1200

gcacagaggc cgcagaatgt gctctagatt ccgatgctga cttgctgggt attatatgtg 1260

tgcccaatag aaagagaaca attgacccgg ttattgcaag gaaaatttca agtcttgtaa 1320

aagcatataa aaatagttca ggcactccga aatacttggt tggcgtgttt cgtaatcaac 1380

ctaaggagga tgttttggct ctggtcaatg attacggcat tgatatcgtc caactgcatg 1440

gagatgagtc gtggcaagaa taccaagagt tcctcggttt gccagttatt aaaagactcg 1500

tatttccaaa agactgcaac atactactca gtgcagcttc acagaaacct cattcgttta 1560

ttcccttgtt tgattcagaa gccggtggga caggtgaact tttggattgg aactcgattt 1620

ctgactgggt tggaaggcaa gagagccccg aaagcttaca ttttatgtta gctggtggac 1680

tgacgccaga aaatgttggt gatgcgctta gattaaatgg cgttattggt gttgatgtaa 1740

gcggaggtgt ggagacaaat ggtgtaaaag actctaacaa aatagcaaat ttcgtcaaaa 1800

atgctaagaa atagtcagta ctgacaataa aaagattctt gttttcaaga acttgtcatt 1860

tgtatagttt ttttatattg tagttgttct attttaatca aatgttagcg tgatttatat 1920

ttttttttcgc ctcgacatca tctgcccaga tgcgaagtta agtgcgcaga aagtaatatc 1980

atgcgtcaat cgtatgtgaa tgctggtcgc tatactgctg tcgattcgat actaacgccg 2040

ccatccagtg tcgaaacgct atgatccaat atcaaaggaa actaggtttt gtaaaaaata 2100

ttttttatat taaaaaaata agttgattat attaaaaata tgtttaaaag ttaattaata 2160

tgtaagttaa aatgttcgaa ttaatacaag tgtgattttg catgtattta gtattttatt 2220

ttatttccta attctggggt gctaagcacc ccacgcgacc gcttatgcaa ctttgtaggc 2280

gcgcccaatt aagggttaag ccgctaaagg cattatccgc caagtacaat tttttactct 2340

tcgaagatag aaaatttgct gacattggta atacagtcaa attgcagtac tctgcgggtg 2400

tatacagaat agcagaatgg gcagacatta cgaatgcaca cggtgtggtg ggcccaggta 2460

ttgttagcgg tttgaagcag gcggcagaag aagtaacaaa ggaacctaga ggccttttga 2520

tgttagcaga attgtcatgc aagggctccc tatctactgg agaatatact aagggtactg 2580

ttgacattgc gaaaagcgac aaagattttg ttatcggctt tattgctcaa agagacatgg 2640

gtggaagaga tgaaggttac gattggttga ttatgacacc cggtgtgggt ttagatgaca 2700

agggagatgc attgggtcaa cagtatagaa ccgtggatga tgttgtctct acaggatctg 2760

acattattat tgttggaaga ggactatttg caaagggaag ggatgctaag gtagagggtg 2820

aacgttacag aaaagcaggc tgggaagcat atttgagaag atgcggccag caaaactaaa 2880

aaactgtatt ataagtaaat gcatgtatac taaactcaca aattagagct tcaatttaat 2940

tatatcagtt attaccc 2957

<210> 50
<211> 3253
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 50
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacacgttca ctgccggtgt caacacgtag ttgacacacg 420

tacattcgcc ggtggccact gtcaatacgt tgttgacacc aaaactatcc atttttaata 480

tattgtcacg gggtcggctt ttatcgcatg ttatttattt atttattaat agattcgata 540

gcccgtgtaa aattgaatgg tatagttgga ttcatttttc gaattattta tagaatattt 600

ttcctaatta ttattttcgt tgatattatt taatatctta atatataata cacatatacc 660

aaattattat tgttgaaata ttacacagtt ttatctttta tgtttgacag tcattcttca 720

acgtgcgtac attgtcgtag tcagtcgtag tcactagaat tgatattatt ttgtgtgtgt 780

ttttttaagt acatttaaaa ttgttcattt taatcctaca tagtgatagt atagtttagc 840

ttgcctcgtc cccgccgggt cacccggcca gcgacatgga ggcccagaat accctccttg 900

acagtcttga cgtgcgcagc tcaggggcat gatgtgactg tcgcccgtac atttagccca 960

tacatcccca tgtataatca tttgcatcca tacattttga tggccgcacg gcgcgaagca 1020

aaaattacgg ctcctcgctg cagaccagcg agcagggaaa cgctcccctc acagacgcgt 1080

tgaattgtcc ccacgccgcg cccctgtaga gaaatataaa aggttaggat ttgccactga 1140

ggttcttctt tcatatactt ccttttaaaa tcttgctagg atacagttct cacatcacat 1200

ccgaacataa acaacaatgt ctgttattaa tttcacaggt agttctggtc cattggtgaa 1260

agtttgcggc ttgcagagca cagaggccgc agaatgtgct ctagattccg atgctgactt 1320

gctgggtatt atatgtgtgc ccaatagaaa gagaacaatt gacccggtta ttgcaaggaa 1380

aatttcaagt cttgtaaaag catataaaaa tagttcaggc actccgaaat acttggttgg 1440

cgtgtttcgt aatcaaccta aggaggatgt tttggctctg gtcaatgatt acggcattga 1500

tatcgtccaa ctgcatggag atgagtcgtg gcaagaatac caagagttcc tcggtttgcc 1560

agttattaaa agactcgtat ttccaaaaga ctgcaacata ctactcagtg cagcttcaca 1620

gaaacctcat tcgtttattc ccttgtttga ttcagaagcc ggtgggacag gtgaactttt 1680

ggattggaac tcgatttctg actgggttgg aaggcaagag agccccgaaa gcttacattt 1740

tatgttagct ggtggactga cgccagaaaa tgttggtgat gcgcttagat taaatggcgt 1800

tattggtgtt gatgtaagcg gaggtgtgga gacaaatggt gtaaaagact ctaacaaaat 1860

agcaaatttc gtcaaaaatg ctaagaaata gtcagtactg acaataaaaa gattcttgtt 1920

ttcaagaact tgtcatttgt atagtttttt tatattgtag ttgttctatt ttaatcaaat 1980

gttagcgtga tttatatttt ttttcgcctc gacatcatct gcccagatgc gaagttaagt 2040

gcgcagaaag taatatcatg cgtcaatcgt atgtgaatgc tggtcgctat actgctgtcg 2100

attcgatact aacgccgcca tccagtgtcg aaacgctatg atccaatatc aaaggaatta 2160

aaaattatgt ttattgtttt atttatattt atacttattt gtaagttaaa aactacagtt 2220

taattcaata agtagtattt ttttatttta tttcatttta ttaaatatta aaaataaatc 2280

tatacaaaaa aaaagttgaa ttttcatttt acatttttgt gtaaccgctg tgttgtagta 2340

caaattgaaa aaaaccaaag tacttataaa ctcaatagta tcgtaatatt attgaaaaac 2400

ataattgtaa gtgtgatgta tgataattta tcaagtattt atttagatat aattgtggat 2460

tcttatttat tattagcatg aatcgggcgc gcaacgccgg tgtcaacacg tagttgacag 2520

tatcagccga gactggtttt tggttacggc tacgcgcgcg ctaatgcata attcggtcgg 2580

cagtgaacgt gttaagccgc taaaggcatt atccgccaag tacaattttt tactcttcga 2640

agatagaaaa tttgctgaca ttggtaatac agtcaaattg cagtactctg cgggtgtata 2700

cagaatagca gaatgggcag acattacgaa tgcacacggt gtggtgggcc caggtattgt 2760

tagcggtttg aagcaggcgg cagaagaagt aacaaaggaa cctagaggcc ttttgatgtt 2820

agcagaattg tcatgcaagg gctccctatc tactggagaa tatactaagg gtactgttga 2880

cattgcgaaa agcgacaaag attttgttat cggctttatt gctcaaagag acatgggtgg 2940

aagagatgaa ggttacgatt ggttgattat gacacccggt gtgggtttag atgacaaggg 3000

agatgcattg ggtcaacagt atagaaccgt ggatgatgtt gtctctacag gatctgacat 3060

tattattgtt ggaagaggac tatttgcaaa gggaagggat gctaaggtag agggtgaacg 3120

ttacagaaaa gcaggctggg aagcatattt gagaagatgc ggccagcaaa actaaaaaac 3180

tgtattataa gtaaatgcat gtatactaaa ctcacaaatt agagcttcaa tttaattata 3240

tcagttatta ccc 3253

<210> 51
<211> 2849
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 51
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacactccac cgcacgcgcg tctactattg tagactgcag 420

aatttagtta cgcaatattt acaacattca tgtaagagaa gttgcctgtt ttcgtgtatt 480

cctcaaaaat gacaccctta acgtatttag ttggttttca aacgcggttg ctagtgtatc 540

gtcgagtttt tttgttattt ctacgattgt agagcacgcg tgttctcccg taactaattc 600

tgttaccgcg taagtatgca atttaagcgt tatttatggg tttttcgtta tgttacattt 660

ttaggtttag cttgcctcgt ccccgccggg tcacccggcc agcgacatgg aggcccagaa 720

taccctcctt gacagtcttg acgtgcgcag ctcaggggca tgatgtgact gtcgcccgta 780

catttagccc atacatcccc atgtataatc atttgcatcc atacattttg atggccgcac 840

ggcgcgaagc aaaaattacg gctcctcgct gcagaccagc gagcagggaa acgctcccct 900

cacagacgcg ttgaattgtc cccacgccgc gcccctgtag agaaatataa aaggttagga 960

tttgccactg aggttcttct ttcatatact tccttttaaa atcttgctag gatacagttc 1020

tcacatcaca tccgaacata aacaacaatg tctgttatta atttcacagg tagttctggt 1080

ccattggtga aagtttgcgg cttgcagagc acagaggccg cagaatgtgc tctagattcc 1140

gatgctgact tgctgggtat tatatgtgtg cccaatagaa agagaacaat tgacccggtt 1200

attgcaagga aaatttcaag tcttgtaaaa gcatataaaa atagttcagg cactccgaaa 1260

tacttggttg gcgtgtttcg taatcaacct aaggaggatg ttttggctct ggtcaatgat 1320

tacggcattg atatcgtcca actgcatgga gatgagtcgt ggcaagaata ccaagagttc 1380

ctcggtttgc cagttattaa aagactcgta tttccaaaag actgcaacat actactcagt 1440

gcagcttcac agaaacctca ttcgtttatt cccttgtttg attcagaagc cggtgggaca 1500

ggtgaacttt tggattggaa ctcgatttct gactgggttg gaaggcaaga gagccccgaa 1560

agcttacatt ttatgttagc tggtggactg acgccagaaa atgttggtga tgcgcttaga 1620

ttaaatggcg ttattggtgt tgatgtaagc ggaggtgtgg agacaaatgg tgtaaaagac 1680

tctaacaaaa tagcaaattt cgtcaaaaat gctaagaaat agtcagtact gacaataaaa 1740

agattcttgt tttcaagaac ttgtcatttg tatagttttt ttatattgta gttgttctat 1800

tttaatcaaa tgttagcgtg atttatattt tttttcgcct cgacatcatc tgcccagatg 1860

cgaagttaag tgcgcagaaa gtaatatcat gcgtcaatcg tatgtgaatg ctggtcgcta 1920

tactgctgtc gattcgatac taacgccgcc atccagtgtc gaaacgctat gatccaatat 1980

caaaggactt gaagatatat tttattttac tccatactat accttatttt cttttgattt 2040

ctataaataa agttgttata agtatatcta atacttttta ttatcagaaa tggaaaataa 2100

ataaagattc taataagacg cgaatgttct actattgtag tacatgcgtg ttttgttgta 2160

tgaaaaaggg gcgcgtgcgg tggagtgtta agccgctaaa ggcattatcc gccaagtaca 2220

atttttact cttcgaagat agaaaatttg ctgacattgg taatacagtc aaattgcagt 2280

actctgcggg tgtatacaga atagcagaat gggcagacat tacgaatgca cacggtgtgg 2340

tgggcccagg tattgttagc ggtttgaagc aggcggcaga agaagtaaca aaggaaccta 2400

gaggcctttt gatgttagca gaattgtcat gcaagggctc cctatctact ggagaatata 2460

ctaagggtac tgttgacatt gcgaaaagcg acaaagattt tgttatcggc tttattgctc 2520

aaagagacat gggtggaaga gatgaaggtt acgattggtt gattatgaca cccggtgtgg 2580

gtttagatga caagggagat gcattgggtc aacagtatag aaccgtggat gatgttgtct 2640

ctacaggatc tgacattatt attgttggaa gaggactatt tgcaaaggga agggatgcta 2700

aggtagaggg tgaacgttac agaaaagcag gctgggaagc atatttgaga agatgcggcc 2760

agcaaaacta aaaaactgta ttataagtaa atgcatgtat actaaactca caaattagag 2820

cttcaattta attatatcag ttattaccc 2849

<210> 52
<211> 3253
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 52
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctagaa tgcacgactg gggtcgattt cgaccccagg 420

caaactttga actatatacg ctcctgttcg actaactctc taaaagtacg ggctacgtcg 480

ggcgcagcgt tagttgttcg ctggcagtga cgcagcaccg tcgcaaagcg tgcgtggggt 540

cgatattgac cccagttgtg agtttccgtt tgtgttttgt cacggtaagc taattttata 600

ttttttgcta gaatcaatat atttcatgta ttattacgta atctgagcat aaatagtcat 660

aaatattatt taagacaaaa tatctcacga cttagtcggt aaaaatcccg ttgcctacag 720

ataagattga cattttgcag aaagtttagc ttgcctcgtc cccgccgggt cacccggcca 780

gcgacatgga ggcccagaat accctccttg acagtcttga cgtgcgcagc tcaggggcat 840

gatgtgactg tcgcccgtac atttagccca tacatcccca tgtataatca tttgcatcca 900

tacattttga tggccgcacg gcgcgaagca aaaattacgg ctcctcgctg cagaccagcg 960

agcagggaaa cgctcccctc acagacgcgt tgaattgtcc ccacgccgcg cccctgtaga 1020

gaaatataaa aggttaggat ttgccactga ggttcttctt tcatatactt ccttttaaaa 1080

tcttgctagg atacagttct cacatcacat ccgaacataa acaacaatgt ctgttattaa 1140

tttcacaggt agttctggtc cattggtgaa agtttgcggc ttgcagagca cagaggccgc 1200

agaatgtgct ctagattccg atgctgactt gctgggtatt atatgtgtgc ccaatagaaa 1260

gagaacaatt gacccggtta ttgcaaggaa aatttcaagt cttgtaaaag catataaaaa 1320

tagttcaggc actccgaaat acttggttgg cgtgtttcgt aatcaaccta aggaggatgt 1380

tttggctctg gtcaatgatt acggcattga tatcgtccaa ctgcatggag atgagtcgtg 1440

gcaagaatac caagagttcc tcggtttgcc agttattaaa agactcgtat ttccaaaaga 1500

ctgcaacata ctactcagtg cagcttcaca gaaacctcat tcgtttattc ccttgtttga 1560

ttcagaagcc ggtgggacag gtgaactttt ggattggaac tcgatttctg actgggttgg 1620

aaggcaagag agccccgaaa gcttacattt tatgttagct ggtggactga cgccagaaaa 1680

tgttggtgat gcgcttagat taaatggcgt tattggtgtt gatgtaagcg gaggtgtgga 1740

gacaaatggt gtaaaagact ctaacaaaat agcaaatttc gtcaaaaatg ctaagaaata 1800

gtcagtactg acaataaaaa gattcttgtt ttcaagaact tgtcatttgt atagtttttt 1860

tatattgtag ttgttctatt ttaatcaaat gttagcgtga tttatatttt ttttcgcctc 1920

gacatcatct gcccagatgc gaagttaagt gcgcagaaag taatatcatg cgtcaatcgt 1980

atgtgaatgc tggtcgctat actgctgtcg attcgatact aacgccgcca tccagtgtcg 2040

aaacgctatg atccaatatc aaaggatgcg actaaataag tatttttcat ttttttttcat 2100

atttttact attttgtatc aaattaaatt aaaataatac ttaaaataca atttttatg 2160

gtttttttcat cgatttttc catatttcaa ctttgcgaat ttcttcattt ttataatctt 2220

aaataaatat acttttttgaa cagaacataa cgatgacaat ttttttccaa ttgtctaatg 2280

tgtcctcttc aaagtttgaa ttttgaaaat tggttgatta caaaaaaaga tacaaatttt 2340

tgttttaaaa aagaggtttt tgctgatttt ctgcattttt cggtcttcaa atggattttt 2400

cactaactaa acttgagtaa aattaaattt atcgtatact attctctttt ttattaaaaa 2460

acgaagaaat ttatgtacta ttaaggccct ttatctctgt aggaccggtt ttacgatcaa 2520

aaaagcgttg agtcgatatt gaccccagtt atgagttaaa aggtaaaaaa aatgacttgt 2580

gcgttctagg gttaagccgc taaaggcatt atccgccaag tacaattttt tactcttcga 2640

agatagaaaa tttgctgaca ttggtaatac agtcaaattg cagtactctg cgggtgtata 2700

cagaatagca gaatgggcag acattacgaa tgcacacggt gtggtgggcc caggtattgt 2760

tagcggtttg aagcaggcgg cagaagaagt aacaaaggaa cctagaggcc ttttgatgtt 2820

agcagaattg tcatgcaagg gctccctatc tactggagaa tatactaagg gtactgttga 2880

cattgcgaaa agcgacaaag attttgttat cggctttatt gctcaaagag acatgggtgg 2940

aagagatgaa ggttacgatt ggttgattat gacacccggt gtgggtttag atgacaaggg 3000

agatgcattg ggtcaacagt atagaaccgt ggatgatgtt gtctctacag gatctgacat 3060

tattattgtt ggaagaggac tatttgcaaa gggaagggat gctaaggtag agggtgaacg 3120

ttacagaaaa gcaggctggg aagcatattt gagaagatgc ggccagcaaa actaaaaaac 3180

tgtattataa gtaaatgcat gtatactaaa ctcacaaatt agagcttcaa tttaattata 3240

tcagttatta ccc 3253

<210> 53
<211> 2927
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 53
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctacag tggtcgcgcg gatgacactt gtcatccacc 420

acttttaatt tgctgataga gttggtatag gtttaggtgg ggaactgtgg ttcccaatag 480

ctgcttatta tgtatacgca tgtggtatga acgagtagtt ttgaattgat ttttagtaat 540

aaggctccta gtgtgagtta aagttacccg gaggacaggt gtcatccacg cgaccattga 600

cgttagtgtt ggtttcatag acactgtgta tattttccac catttctcat cgctgaaggt 660

accaatgcag tttatatttt acattagttc aacacagcat tttaggatcc atattggagg 720

aaattttcag ctgtttagct tgcctcgtcc ccgccgggtc acccggccag cgacatggag 780

gcccagaata ccctccttga cagtcttgac gtgcgcagct caggggcatg atgtgactgt 840

cgcccgtaca tttagcccat acatccccat gtataatcat ttgcatccat acattttgat 900

ggccgcacgg cgcgaagcaa aaattacggc tcctcgctgc agaccagcga gcagggaaac 960

gctcccctca cagacgcgtt gaattgtccc cacgccgcgc ccctgtagag aaatataaaa 1020

ggttaggatt tgccactgag gttcttcttt catatacttc cttttaaaat cttgctagga 1080

tacagttctc acatcacatc cgaacataaa caacaatgtc tgttattaat ttcacaggta 1140

gttctggtcc attggtgaaa gtttgcggct tgcagagcac agaggccgca gaatgtgctc 1200

tagattccga tgctgacttg ctgggtatta tatgtgtgcc caatagaaag agaacaattg 1260

acccggttat tgcaaggaaa atttcaagtc ttgtaaaagc atataaaaat agttcaggca 1320

ctccgaaata cttggttggc gtgtttcgta atcaacctaa ggaggatgtt ttggctctgg 1380

tcaatgatta cggcattgat atcgtccaac tgcatggaga tgagtcgtgg caagaatacc 1440

aagagttcct cggtttgcca gttattaaaa gactcgtatt tccaaaagac tgcaacatac 1500

tactcagtgc agcttcacag aaacctcatt cgtttattcc cttgtttgat tcagaagccg 1560

gtgggacagg tgaacttttg gattggaact cgatttctga ctgggttgga aggcaagaga 1620

gccccgaaag cttacatttt atgttagctg gtggactgac gccagaaaat gttggtgatg 1680

cgcttagatt aaatggcgtt attggtgttg atgtaagcgg aggtgtggag acaaatggtg 1740

taaaagactc taacaaaata gcaaatttcg tcaaaaatgc taagaaatag tcagtactga 1800

caataaaaag attcttgttt tcaagaactt gtcatttgta tagttttttt atattgtagt 1860

tgttctattt taatcaaatg ttagcgtgat ttatattttt tttcgcctcg acatcatctg 1920

cccagatgcg aagttaagtg cgcagaaagt aatatcatgc gtcaatcgta tgtgaatgct 1980

ggtcgctata ctgctgtcga ttcgatacta acgccgccat ccagtgtcga aacgctatga 2040

tccaatatca aaggacttgt aaaataacta tcatgtatgt aataaaaata ttttttgagt 2100

tctgttggta attaatactt tctctatacc atcagtaata aattctgatt accttgtaac 2160

acaaaaagat attaaatccg taaagtggcc ctaaacaaac tgtggatgac cactgtcatc 2220

cgcgcgatta tgcccgtcct aaacattgac gcgaccgctg cagggttaag ccgctaaagg 2280

cattatccgc caagtacaat tttttactct tcgaagatag aaaatttgct gacattggta 2340

atacagtcaa attgcagtac tctgcgggtg tatacagaat agcagaatgg gcagacatta 2400

cgaatgcaca cggtgtggtg ggcccaggta ttgttagcgg tttgaagcag gcggcagaag 2460

aagtaacaaa ggaacctaga ggccttttga tgttagcaga attgtcatgc aagggctccc 2520

tatctactgg agaatatact aagggtactg ttgacattgc gaaaagcgac aaagattttg 2580

ttatcggctt tattgctcaa agagacatgg gtggaagaga tgaaggttac gattggttga 2640

ttatgacacc cggtgtgggt ttagatgaca agggagatgc attgggtcaa cagtatagaa 2700

ccgtggatga tgttgtctct acaggatctg acattattat tgttggaaga ggactatttg 2760

caaagggaag ggatgctaag gtagagggtg aacgttacag aaaagcaggc tgggaagcat 2820

atttgagaag atgcggccag caaaactaaa aaactgtatt ataagtaaat gcatgtatac 2880

taaactcaca aattagagct tcaatttaat tatatcagtt attaccc 2927

<210> 54
<211> 2797
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 54
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacccgcgag aactcgcacc gggtataaca tgcccgatcc 420

attttcattc aaagtttttc ttactttctt ctattggaac agagccagga tttcgtgtag 480

ctgtattcaa ggtcacattc tttcactagg ggaaaagctg gttttgttct ataaatagat 540

tttcaggaac aggtgtcggg ggtatgtcat acccgtgcta gtcctggcgt cagtcggatc 600

attccttctt tttctctcag tttagtgaat tgtttagctt gcctcgtccc cgccgggtca 660

cccggccagc gacatggagg cccagaatac cctccttgac agtcttgacg tgcgcagctc 720

aggggcatga tgtgactgtc gcccgtacat ttagcccata catccccatg tataatcatt 780

tgcatccata cattttgatg gccgcacggc gcgaagcaaa aattacggct cctcgctgca 840

gaccagcgag cagggaaacg ctcccctcac agacgcgttg aattgtcccc acgccgcgcc 900

cctgtagaga aatataaaag gttaggattt gccactgagg ttcttctttc atatacttcc 960

ttttaaaatc ttgctaggat acagttctca catcacatcc gaacataaac aacaatgtct 1020

gttattaatt tcacaggtag ttctggtcca ttggtgaaag tttgcggctt gcagagcaca 1080

gaggccgcag aatgtgctct agattccgat gctgacttgc tgggtattat atgtgtgccc 1140

aatagaaaga gaacaattga cccggttatt gcaaggaaaa tttcaagtct tgtaaaagca 1200

tataaaaata gttcaggcac tccgaaatac ttggttggcg tgtttcgtaa tcaacctaag 1260

gaggatgttt tggctctggt caatgattac ggcattgata tcgtccaact gcatggagat 1320

gagtcgtggc aagaatacca agagttcctc ggtttgccag ttattaaaag actcgtattt 1380

ccaaaagact gcaacatact actcagtgca gcttcacaga aacctcattc gtttattccc 1440

ttgtttgatt cagaagccgg tgggacaggt gaacttttgg attggaactc gatttctgac 1500

tgggttggaa ggcaagagag ccccgaaagc ttacatttta tgttagctgg tggactgacg 1560

ccagaaaatg ttggtgatgc gcttagatta aatggcgtta ttggtgttga tgtaagcgga 1620

ggtgtggaga caaatggtgt aaaagactct aacaaaatag caaatttcgt caaaaatgct 1680

aagaaatagt cagtactgac aataaaaaga ttcttgtttt caagaacttg tcatttgtat 1740

agtttttta tattgtagtt gttctatttt aatcaaatgt tagcgtgatt tatatttttt 1800

ttcgcctcga catcatctgc ccagatgcga agttaagtgc gcagaaagta atatcatgcg 1860

tcaatcgtat gtgaatgctg gtcgctatac tgctgtcgat tcgatactaa cgccgccatc 1920

cagtgtcgaa acgctatgat ccaatatcaa aggaacatgt gagtatgtat ttttaaactc 1980

aataaaattc tttaatgtat tattttgtaa tgtttaatta tgtaaggctt gcttataaac 2040

agtattattt catatttagg tagcagaaat gaactagggt atgagatacc cagcgcgagt 2100

tctcgcgttg gaaaacggtt gcgtgttctc ccgggttaag ccgctaaagg cattatccgc 2160

caagtacaat tttttactct tcgaagatag aaaatttgct gacattggta atacagtcaa 2220

attgcagtac tctgcgggtg tatacagaat agcagaatgg gcagacatta cgaatgcaca 2280

cggtgtggtg ggcccaggta ttgttagcgg tttgaagcag gcggcagaag aagtaacaaa 2340

ggaacctaga ggccttttga tgttagcaga attgtcatgc aagggctccc tatctactgg 2400

agaatatact aagggtactg ttgacattgc gaaaagcgac aaagattttg ttatcggctt 2460

tattgctcaa agagacatgg gtggaagaga tgaaggttac gattggttga ttatgacacc 2520

cggtgtgggt ttagatgaca agggagatgc attgggtcaa cagtatagaa ccgtggatga 2580

tgttgtctct acaggatctg acattattat tgttggaaga ggactatttg caaagggaag 2640

ggatgctaag gtagagggtg aacgttacag aaaagcaggc tgggaagcat atttgagaag 2700

atgcggccag caaaactaaa aaactgtatt ataagtaaat gcatgtatac taaactcaca 2760

aattagagct tcaatttaat tatatcagtt attaccc 2797

<210> 55
<211> 2954
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 55
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctagat aactaaacat tcgtccgctc gacgacgcgc 420

tatgccgcga aattgaagtt tacctattat tccgcgtccc ccgcccccgc cgcttttttct 480

agcttcctga tttgcaaaat agtgcatcgc gtgacacgct cgaggtcaca cgacaattag 540

gtcgaaagtt acaggaattt cgtcgtccgc tcgacgaaag tttagtaatt acgtaagttt 600

ggcaaaggta agtgaatgaa gtatttttttt ataattattt tttaattctt tatagtgata 660

acgtaaggtt tatttaaatt tattactttt atagttattt agccaattgt tataaattcc 720

ttgttattgc tgaaaaattt gcctgtttta gtcaaaattt attaactttt cgatcgtttt 780

ttaggcctag tttagcttgc ctcgtccccg ccgggtcacc cggccagcga catggaggcc 840

cagaataccc tccttgacag tcttgacgtg cgcagctcag gggcatgatg tgactgtcgc 900

ccgtacattt agcccataca tccccatgta taatcatttg catccataca ttttgatggc 960

cgcacggcgc gaagcaaaaa ttacggctcc tcgctgcaga ccagcgagca gggaaacgct 1020

cccctcacag acgcgttgaa ttgtccccac gccgcgcccc tgtagagaaa tataaaaggt 1080

taggatttgc cactgaggtt cttctttcat atacttcctt ttaaaatctt gctaggatac 1140

agttctcaca tcacatccga acataaacaa caatgtctgt tattaatttc acaggtagtt 1200

ctggtccatt ggtgaaagtt tgcggcttgc agagcacaga ggccgcagaa tgtgctctag 1260

attccgatgc tgacttgctg ggtattatat gtgtgcccaa tagaaagaga acaattgacc 1320

cggttattgc aaggaaaatt tcaagtcttg taaaagcata taaaaatagt tcaggcactc 1380

cgaaatactt ggttggcgtg tttcgtaatc aacctaagga ggatgttttg gctctggtca 1440

atgattacgg cattgatatc gtccaactgc atggagatga gtcgtggcaa gaataccaag 1500

agttcctcgg tttgccagtt attaaaagac tcgtatttcc aaaagactgc aacatactac 1560

tcagtgcagc ttcacagaaa cctcattcgt ttattccctt gtttgattca gaagccggtg 1620

ggacaggtga acttttggat tggaactcga tttctgactg ggttggaagg caagagagcc 1680

ccgaaagctt acattttatg ttagctggtg gactgacgcc agaaaatgtt ggtgatgcgc 1740

ttagattaaa tggcgttatt ggtgttgatg taagcggagg tgtggagaca aatggtgtaa 1800

aagactctaa caaaatagca aatttcgtca aaaatgctaa gaaatagtca gtactgacaa 1860

taaaaagatt cttgttttca agaacttgtc atttgtatag ttttttttata ttgtagttgt 1920

tctattttaa tcaaatgtta gcgtgattta tatttttttt cgcctcgaca tcatctgccc 1980

agatgcgaag ttaagtgcgc agaaagtaat atcatgcgtc aatcgtatgt gaatgctggt 2040

cgctatactg ctgtcgattc gatactaacg ccgccatcca gtgtcgaaac gctatgatcc 2100

aatatcaaag gatcatcttt cactaagtaa ttttgttcct atttagtaga taagtaacac 2160

ataattattg tgatattcaa aacttaagag gtttaataaa taataataaa aaaaaaatgg 2220

tttttatttc gtagtctgct cgacgaatgt ttagttatta cgtaaccgtg aatatagttt 2280

agtagtctag ggttaagccg ctaaaggcat tatccgccaa gtacaatttt ttactcttcg 2340

aagatagaaa atttgctgac attggtaata cagtcaaatt gcagtactct gcgggtgtat 2400

acagaatagc agaatgggca gacattacga atgcacacgg tgtggtgggc ccaggtattg 2460

ttagcggttt gaagcaggcg gcagaagaag taacaaagga acctagaggc cttttgatgt 2520

tagcagaatt gtcatgcaag ggctccctat ctactggaga atatactaag ggtactgttg 2580

acattgcgaa aagcgacaaa gattttgtta tcggctttat tgctcaaaga gacatgggtg 2640

gaagagatga aggttacgat tggttgatta tgacacccgg tgtgggttta gatgacaagg 2700

gagatgcatt gggtcaacag tatagaaccg tggatgatgt tgtctctaca ggatctgaca 2760

ttattattgt tggaagagga ctatttgcaa agggaaggga tgctaaggta gagggtgaac 2820

gttacagaaa agcaggctgg gaagcatatt tgagaagatg cggccagcaa aactaaaaaa 2880

ctgtattata agtaaatgca tgtatactaa actcacaaat tagagcttca atttaattat 2940

atcagttatt accc 2954

<210> 56
<211> 3065
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 56
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctagaa gcccaatcta cgtcattctg acgtgtatgt 420

cgccgaaaat actctgtctc tttctcctgc acgatcggat tgccgcgaac gctcgattca 480

acccagttgg cgccgagatc tattggagga ctgcggcgtt gattcggtaa gtcccgccat 540

tttgtcatag taacagtatt gcacgtcagc ttgacgtata tttgggcttt gtgttatttt 600

tgtaaatttt caacgttagt ttattattgc atctttttgt tacattactg gtttatttgc 660

atgtattact caaatattat ttttatttta gcgtagaaaa tacagcctag tttagcttgc 720

ctcgtccccg ccgggtcacc cggccagcga catggaggcc cagaataccc tccttgacag 780

tcttgacgtg cgcagctcag gggcatgatg tgactgtcgc ccgtacattt agcccataca 840

tccccatgta taatcatttg catccataca ttttgatggc cgcacggcgc gaagcaaaaa 900

ttacggctcc tcgctgcaga ccagcgagca gggaaacgct cccctcacag acgcgttgaa 960

ttgtccccac gccgcgcccc tgtagagaaa tataaaaggt taggatttgc cactgaggtt 1020

cttctttcat atacttcctt ttaaaatctt gctaggatac agttctcaca tcacatccga 1080

acataaacaa caatgtctgt tattaatttc acaggtagtt ctggtccatt ggtgaaagtt 1140

tgcggcttgc agagcacaga ggccgcagaa tgtgctctag attccgatgc tgacttgctg 1200

ggtattatat gtgtgcccaa tagaaagaga acaattgacc cggttattgc aaggaaaatt 1260

tcaagtcttg taaaagcata taaaaatagt tcaggcactc cgaaatactt ggttggcgtg 1320

tttcgtaatc aacctaagga ggatgttttg gctctggtca atgattacgg cattgatatc 1380

gtccaactgc atggagatga gtcgtggcaa gaataccaag agttcctcgg tttgccagtt 1440

attaaaagac tcgtatttcc aaaagactgc aacatactac tcagtgcagc ttcacagaaa 1500

cctcattcgt ttattccctt gtttgattca gaagccggtg ggacaggtga acttttggat 1560

tggaactcga tttctgactg ggttggaagg caagagagcc ccgaaagctt acattttatg 1620

ttagctggtg gactgacgcc agaaaatgtt ggtgatgcgc ttagattaaa tggcgttatt 1680

ggtgttgatg taagcggagg tgtggagaca aatggtgtaa aagactctaa caaaatagca 1740

aatttcgtca aaaatgctaa gaaatagtca gtactgacaa taaaaagatt cttgttttca 1800

agaacttgtc atttgtatag ttttttttata ttgtagttgt tctattttaa tcaaatgtta 1860

gcgtgattta tatttttttt cgcctcgaca tcatctgccc agatgcgaag ttaagtgcgc 1920

agaaagtaat atcatgcgtc aatcgtatgt gaatgctggt cgctatactg ctgtcgattc 1980

gatactaacg ccgccatcca gtgtcgaaac gctatgatcc aatatcaaag gatcatcaga 2040

ctgtttttt tgtatttgca ttatatatta tattctaaag ttgatttaat tctaagaaaa 2100

acattaaaat aagtttcttt ttgtaaaatt taattaatta taagaaaaag tttaagttga 2160

tctcattttt tataaaaatt tgcaatgttt ccaaagttat tattgtaaaa gaataaataa 2220

aagtaaactg agttttaatt gatgttttat tatatcatta tactatatat tacttaaata 2280

aaacaataac tgaatgtatt tctaaaagga atcactagaa aatatagtga tcaaaaattt 2340

acacgtcatt tttgcgtatg attgggcttt ataggttcta aaaatatgat tgggcctcta 2400

gggttaagcc gctaaaggca ttatccgcca agtacaattt tttactcttc gaagatagaa 2460

aatttgctga cattggtaat acagtcaaat tgcagtactc tgcgggtgta tacagaatag 2520

cagaatgggc agacattacg aatgcacacg gtgtggtggg cccaggtatt gttagcggtt 2580

tgaagcaggc ggcagaagaa gtaacaaagg aacctagagg ccttttgatg ttagcagaat 2640

tgtcatgcaa gggctcccta tctactggag aatatactaa gggtactgtt gacattgcga 2700

aaagcgacaa agattttgtt atcggcttta ttgctcaaag agacatgggt ggaagagatg 2760

aaggttacga ttggttgatt atgacacccg gtgtgggttt agatgacaag ggagatgcat 2820

tgggtcaaca gtatagaacc gtggatgatg ttgtctctac aggatctgac attattattg 2880

ttggaagagg actatttgca aagggaaggg atgctaaggt agagggtgaa cgttacagaa 2940

aagcaggctg ggaagcatat ttgagaagat gcggccagca aaactaaaaa actgtattat 3000

aagtaaatgc atgtatacta aactcacaaa ttagagcttc aatttaatta tatcagttat 3060

taccc 3065

<210> 57
<211> 3323
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 57
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctcaaa tggtttttgg ggtccattgg accccagagg 420

caaattagaa accatttgca gggggcatgt gtacaatagc aggccaatat ttttggagaa 480

ttacttttc tatggctttt ctatgcccat agaaactcaa ttgtgtgaca ggtttaatat 540

cttgaataat tggacttatt cggttgaatg aattctgggg tccaagggac cccagacaag 600

caagcccata atattgttgt gatatctatg gttgatgccc agtcatataa atatgattcc 660

acaaagcaac tctcacgact attttatgtc tgctgcctac cgcaactgac ttgtgtgttc 720

taacggcaat cagcttcagt tgataagttc aactatcgcg tacaactctg gcaactttgt 780

caatccgcca ctgaaagcgc tgccgacact ggtttagctt gcctcgtccc cgccgggtca 840

cccggccagc gacatggagg cccagaatac cctccttgac agtcttgacg tgcgcagctc 900

aggggcatga tgtgactgtc gcccgtacat ttagcccata catccccatg tataatcatt 960

tgcatccata cattttgatg gccgcacggc gcgaagcaaa aattacggct cctcgctgca 1020

gaccagcgag cagggaaacg ctcccctcac agacgcgttg aattgtcccc acgccgcgcc 1080

cctgtagaga aatataaaag gttaggattt gccactgagg ttcttctttc atatacttcc 1140

ttttaaaatc ttgctaggat acagttctca catcacatcc gaacataaac aacaatgtct 1200

gttattaatt tcacaggtag ttctggtcca ttggtgaaag tttgcggctt gcagagcaca 1260

gaggccgcag aatgtgctct agattccgat gctgacttgc tgggtattat atgtgtgccc 1320

aatagaaaga gaacaattga cccggttatt gcaaggaaaa tttcaagtct tgtaaaagca 1380

tataaaaata gttcaggcac tccgaaatac ttggttggcg tgtttcgtaa tcaacctaag 1440

gaggatgttt tggctctggt caatgattac ggcattgata tcgtccaact gcatggagat 1500

gagtcgtggc aagaatacca agagttcctc ggtttgccag ttattaaaag actcgtattt 1560

ccaaaagact gcaacatact actcagtgca gcttcacaga aacctcattc gtttattccc 1620

ttgtttgatt cagaagccgg tgggacaggt gaacttttgg attggaactc gatttctgac 1680

tgggttggaa ggcaagagag ccccgaaagc ttacatttta tgttagctgg tggactgacg 1740

ccagaaaatg ttggtgatgc gcttagatta aatggcgtta ttggtgttga tgtaagcgga 1800

ggtgtggaga caaatggtgt aaaagactct aacaaaatag caaatttcgt caaaaatgct 1860

aagaaatagt cagtactgac aataaaaaga ttcttgtttt caagaacttg tcatttgtat 1920

agtttttta tattgtagtt gttctatttt aatcaaatgt tagcgtgatt tatatttttt 1980

ttcgcctcga catcatctgc ccagatgcga agttaagtgc gcagaaagta atatcatgcg 2040

tcaatcgtat gtgaatgctg gtcgctatac tgctgtcgat tcgatactaa cgccgccatc 2100

cagtgtcgaa acgctatgat ccaatatcaa aggacttgct gtacgagcat catttctgct 2160

atttcaaagt tattacaatt cagaacttgc tacaaaattg cctttaacac ttgagcaaga 2220

tgagctgata gcataactgg ctataataca acatatacat accatatata catattacat 2280

acttataata agtaatctca aaaatttaat ctcaaatctc aaaatctaaa ttttccataa 2340

cttatcataa gcacagagct atgtgcaagt tctgattgta cacttttgc agcttctttt 2400

aattgctcag catcatgaat ttgtacttac atgtaaatat gactatcgcc taattttcat 2460

gtaactgtca tctgtgtgca aacacctgtt ctgtgctttg caaacacctg tacttaataa 2520

agtcaaataa taattaatat taaaattaat agtcaaataa actacacaaa taatctgttg 2580

tgctcagcat cagattctga atggggtcca ttggacccca gaaaaaagaa acagactatt 2640

ttttctttaa ctgtttgagg gttaagccgc taaaggcatt atccgccaag tacaattttt 2700

tactcttcga agatagaaaa tttgctgaca ttggtaatac agtcaaattg cagtactctg 2760

cgggtgtata cagaatagca gaatgggcag acattacgaa tgcacacggt gtggtgggcc 2820

caggtattgt tagcggtttg aagcaggcgg cagaagaagt aacaaaggaa cctagaggcc 2880

ttttgatgtt agcagaattg tcatgcaagg gctccctatc tactggagaa tatactaagg 2940

gtactgttga cattgcgaaa agcgacaaag attttgttat cggctttatt gctcaaagag 3000

acatgggtgg aagagatgaa ggttacgatt ggttgattat gacacccggt gtgggtttag 3060

atgacaaggg agatgcattg ggtcaacagt atagaaccgt ggatgatgtt gtctctacag 3120

gatctgacat tattattgtt ggaagaggac tatttgcaaa gggaagggat gctaaggtag 3180

agggtgaacg ttacagaaaa gcaggctggg aagcatattt gagaagatgc ggccagcaaa 3240

actaaaaaac tgtattataa gtaaatgcat gtatactaaa ctcacaaatt agagcttcaa 3300

tttaattata tcagttatta ccc 3323

<210> 58
<211> 3436
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 58
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccagttaa ccgtgtttga cgactatatc cgtcatggag 420

atttggcaga attttgtgcc atgacgactt tatccgtcat gtgtaaaatt ttgttacaat 480

tcgatattta aattgtagtt ctggagaaaa ttaaatttta ttcctaaatt ttaatatgtt 540

taaaatgttc agaggtcaca acgaaatgaa acaagcaaat aaaaattata aataatttaa 600

gttgattcat aacggtctga gagctaactc gtgaacagtg cagttatatc tggatatttg 660

attatcccga ttttcatctt gatgtaccaa aaccaaaaaa aagtttatta gattcttaat 720

ttagattctg tattcttttt tatactagat tctctatttg cggtgatacc tggaaacagc 780

tcatgtgcgc tatctcactc cttgtttgtt ttggatcagg caatttttgt tgctattcag 840

cgcagttcta ggacttatcg gggatggaga tgaaacggtt gatttttatc agttgtccga 900

gaattcgtaa acgggggcca cccggatata ttgttagcct cacatcttgt gcaaacttta 960

gcgcaggccg cgattagata tccccactta ggtttattca ctcttccgcg gtttactaga 1020

ctctaaccca cgtttgtcat ttcaattttt gaacgtgaac gatgcagtgc atttcagtgt 1080

gtctgaaata gtcagtgaat cgtgccaagt catataaagt gcaatgtaag tgtttcaagt 1140

gtctaattat tatagttatc cagaaaactt tcgtaaccca ctatttttt attcttagct 1200

tattttatcc ccaaagttta gcttgcctcg tccccgccgg gtcacccggc cagcgacatg 1260

gaggcccaga ataccctcct tgacagtctt gacgtgcgca gctcaggggc atgatgtgac 1320

tgtcgcccgt acatttagcc catacatccc catgtataat catttgcatc catacatttt 1380

gatggccgca cggcgcgaag caaaaattac ggctcctcgc tgcagaccag cgagcaggga 1440

aacgctcccc tcacagacgc gttgaattgt ccccacgccg cgcccctgta gagaaatata 1500

aaaggttagg atttgccact gaggttcttc tttcatatac ttccttttaa aatcttgcta 1560

ggatacagtt ctcacatcac atccgaacat aaacaacaat gtctgttatt aatttcacag 1620

gtagttctgg tccattggtg aaagtttgcg gcttgcagag cacagaggcc gcagaatgtg 1680

ctctagattc cgatgctgac ttgctgggta ttatatgtgt gcccaataga aagagaacaa 1740

ttgacccggt tattgcaagg aaaatttcaa gtcttgtaaa agcatataaa aatagttcag 1800

gcactccgaa atacttggtt ggcgtgtttc gtaatcaacc taaggaggat gttttggctc 1860

tggtcaatga ttacggcatt gatatcgtcc aactgcatgg agatgagtcg tggcaagaat 1920

accaagagtt cctcggtttg ccagttatta aaagactcgt atttccaaaa gactgcaaca 1980

tactactcag tgcagcttca cagaaacctc attcgtttat tcccttgttt gattcagaag 2040

ccggtgggac aggtgaactt ttggattgga actcgatttc tgactgggtt ggaaggcaag 2100

agagccccga aagcttacat tttatgttag ctggtggact gacgccagaa aatgttggtg 2160

atgcgcttag attaaatggc gttattggtg ttgatgtaag cggaggtgtg gagacaaatg 2220

gtgtaaaaga ctctaacaaa atagcaaatt tcgtcaaaaa tgctaagaaa tagtcagtac 2280

tgacaataaa aagattcttg ttttcaagaa cttgtcattt gtatagtttt tttatattgt 2340

agttgttcta ttttaatcaa atgttagcgt gatttatatt ttttttcgcc tcgacatcat 2400

ctgcccagat gcgaagttaa gtgcgcagaa agtaatatca tgcgtcaatc gtatgtgaat 2460

gctggtcgct atactgctgt cgattcgata ctaacgccgc catccagtgt cgaaacgcta 2520

tgatccaata tcaaaggaaa ttttgttcaa ctttttaaag ttttccattc attatgtata 2580

aatatatgtt cacattaagc gactgtacaa gtattacgaa taaaattgtt cattttctaa 2640

aatcaagtcg tcattttgac ccaatatttc aacagtgcca cttactctgt gtttgacgac 2700

tatacccgtc atcgcttgat tatcgcgaca cacactggtg cgcgctttgc ccacaggtcg 2760

ccacggttaa ctggttaagc cgctaaaggc attatccgcc aagtacaatt ttttactctt 2820

cgaagataga aaatttgctg acattggtaa tacagtcaaa ttgcagtact ctgcgggtgt 2880

atacagaata gcagaatggg cagacattac gaatgcacac ggtgtggtgg gcccaggtat 2940

tgttagcggt ttgaagcagg cggcagaaga agtaacaaag gaacctagag gccttttgat 3000

gttagcagaa ttgtcatgca agggctccct atctactgga gaatatacta agggtactgt 3060

tgacattgcg aaaagcgaca aagattttgt tatcggcttt attgctcaaa gagacatggg 3120

tggaagagat gaaggttacg attggttgat tatgacaccc ggtgtgggtt tagatgacaa 3180

gggagatgca ttgggtcaac agtatagaac cgtggatgat gttgtctcta caggatctga 3240

cattattatt gttggaagag gactatttgc aaagggaagg gatgctaagg tagagggtga 3300

acgttacaga aaagcaggct gggaagcata tttgagaaga tgcggccagc aaaactaaaa 3360

aactgtatta taagtaaatg catgtatact aaactcacaa attagagctt caatttaatt 3420

atatcagtta ttaccc 3436

<210> 59
<211> 2811
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 59
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccccttaa cctacgattt agattcgaag atgttaggcc 420

gaaattgtat acaagttcgc gcagcgttcg ggacgttcgc acgacttggg tacacgccga 480

tccgggcaat tgtaaacatg acggacatcg cccgtggtag agcggtcgcg gtttgtagat 540

agcacagaca agactcgtga tgtatttcta tcatctcttc gtatcgtaat tagtttccag 600

tcgttcttga tcgcattcgc acgtcgaaat ttacgttcat aaattctaga gaagcaaacc 660

cacaaggttt agcttgcctc gtccccgccg ggtcacccgg ccagcgacat ggaggcccag 720

aataccctcc ttgacagtct tgacgtgcgc agctcagggg catgatgtga ctgtcgcccg 780

tacatttagc ccatacatcc ccatgtataa tcatttgcat ccatacattt tgatggccgc 840

acggcgcgaa gcaaaaatta cggctcctcg ctgcagacca gcgagcaggg aaacgctccc 900

ctcacagacg cgttgaattg tccccacgcc gcgcccctgt agagaaatat aaaaggttag 960

gatttgccac tgaggttctt ctttcatata cttcctttta aaatcttgct aggatacagt 1020

tctcacatca catccgaaca taaacaacaa tgtctgttat taatttcaca ggtagttctg 1080

gtccattggt gaaagtttgc ggcttgcaga gcacagaggc cgcagaatgt gctctagatt 1140

ccgatgctga cttgctgggt attatatgtg tgcccaatag aaagagaaca attgacccgg 1200

ttattgcaag gaaaatttca agtcttgtaa aagcatataa aaatagttca ggcactccga 1260

aatacttggt tggcgtgttt cgtaatcaac ctaaggagga tgttttggct ctggtcaatg 1320

attacggcat tgatatcgtc caactgcatg gagatgagtc gtggcaagaa taccaagagt 1380

tcctcggttt gccagttatt aaaagactcg tatttccaaa agactgcaac atactactca 1440

gtgcagcttc acagaaacct cattcgttta ttcccttgtt tgattcagaa gccggtggga 1500

caggtgaact tttggattgg aactcgattt ctgactgggt tggaaggcaa gagagccccg 1560

aaagcttaca ttttatgtta gctggtggac tgacgccaga aaatgttggt gatgcgctta 1620

gattaaatgg cgttattggt gttgatgtaa gcggaggtgt ggagacaaat ggtgtaaaag 1680

actctaacaa aatagcaaat ttcgtcaaaa atgctaagaa atagtcagta ctgacaataa 1740

aaagattctt gttttcaaga acttgtcatt tgtatagttt ttttatattg tagttgttct 1800

attttaatca aatgttagcg tgatttatat ttttttttcgc ctcgacatca tctgcccaga 1860

tgcgaagtta agtgcgcaga aagtaatatc atgcgtcaat cgtatgtgaa tgctggtcgc 1920

tatactgctg tcgattcgat actaacgccg ccatccagtg tcgaaacgct atgatccaat 1980

atcaaaggat tttgtatttt ggagttttgt ataaataaat attttgtaat acttgcgcct 2040

accacaatta ttgcatcaga ctgtaaatgc gtatcaaata ttccacgtaa tatttacatc 2100

gggcccgatc accgtacgcg ggctatgccc gtcattgtag gttaaggggt taagccgcta 2160

aaggcattat ccgccaagta caatttttta ctcttcgaag atagaaaatt tgctgacatt 2220

ggtaatacag tcaaattgca gtactctgcg ggtgtataca gaatagcaga atgggcagac 2280

attacgaatg cacacggtgt ggtgggccca ggtattgtta gcggtttgaa gcaggcggca 2340

gaagaagtaa caaaggaacc tagaggcctt ttgatgttag cagaattgtc atgcaagggc 2400

tccctatcta ctggagaata tactaagggt actgttgaca ttgcgaaaag cgacaaagat 2460

tttgttatcg gctttattgc tcaaagagac atgggtggaa gagatgaagg ttacgattgg 2520

ttgattatga cacccggtgt gggtttagat gacaagggag atgcattggg tcaacagtat 2580

agaaccgtgg atgatgttgt ctctacagga tctgacatta ttattgttgg aagaggacta 2640

tttgcaaagg gaagggatgc taaggtagag ggtgaacgtt acagaaaagc aggctgggaa 2700

gcatatttga gaagatgcgg ccagcaaaac taaaaaactg tattataagt aaatgcatgt 2760

atactaaact cacaaattag agcttcaatt taattatatc agttattacc c 2811

<210> 60
<211> 3039
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 60
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacctttaag tatggacgtg gagtctcaca ggctactcaa 420

tgtttacgtt ttcatagttt cacctatttc cccccgctcc ccgcgattga gcagctcagt 480

agcttttgtt ttagttgcca aactaccaac gagggaggag gttgtgtcgt ccggtgaatc 540

tcacgtgagt tataaccatc gaaaaattga ctggagcctg ttaggctaca cgtccattgt 600

tgtcatataa tatattttat aagggcgatt atgtttgttt cagattttgt agtacaaagt 660

ttagcttgcc tcgtccccgc cgggtcaccc ggccagcgac atggaggccc agaataccct 720

ccttgacagt cttgacgtgc gcagctcagg ggcatgatgt gactgtcgcc cgtacattta 780

gcccatacat ccccatgtat aatcatttgc atccatacat tttgatggcc gcacggcgcg 840

aagcaaaaat tacggctcct cgctgcagac cagcgagcag ggaaacgctc ccctcacaga 900

cgcgttgaat tgtccccacg ccgcgcccct gtagagaaat ataaaaggtt aggatttgcc 960

actgaggttc ttctttcata tacttccttt taaaatcttg ctaggataca gttctcacat 1020

cacatccgaa cataaacaac aatgtctgtt attaatttca caggtagttc tggtccattg 1080

gtgaaagttt gcggcttgca gagcacagag gccgcagaat gtgctctaga ttccgatgct 1140

gacttgctgg gtattatatg tgtgcccaat agaaagagaa caattgaccc ggttattgca 1200

aggaaaattt caagtcttgt aaaagcatat aaaaatagtt caggcactcc gaaatacttg 1260

gttggcgtgt ttcgtaatca acctaaggag gatgttttgg ctctggtcaa tgattacggc 1320

attgatatcg tccaactgca tggagatgag tcgtggcaag aataccaaga gttcctcggt 1380

ttgccagtta ttaaaagact cgtatttcca aaagactgca acatactact cagtgcagct 1440

tcacagaaac ctcattcgtt tattcccttg tttgattcag aagccggtgg gacaggtgaa 1500

cttttggatt ggaactcgat ttctgactgg gttggaaggc aagagagccc cgaaagctta 1560

cattttatgt tagctggtgg actgacgcca gaaaatgttg gtgatgcgct tagattaaat 1620

ggcgttattg gtgttgatgt aagcggaggt gtggagacaa atggtgtaaa agactctaac 1680

aaaatagcaa atttcgtcaa aaatgctaag aaatagtcag tactgacaat aaaaagattc 1740

ttgttttcaa gaacttgtca tttgtatagt ttttttatat tgtagttgtt ctattttaat 1800

caaatgttag cgtgatttat atttttttc gcctcgacat catctgccca gatgcgaagt 1860

taagtgcgca gaaagtaata tcatgcgtca atcgtatgtg aatgctggtc gctatactgc 1920

tgtcgattcg atactaacgc cgccatccag tgtcgaaacg ctatgatcca atatcaaagg 1980

aatttgcgtt attagactgt tgtcaaaatt ttttgtatta gttacctgaa gtaggttttt 2040

tgtgtttttg gttccttatc tattatattt taagaaaaaa agacaaattt tgttatagta 2100

ataagttgag ctgttttaaa tatctaaaaa tgtagcctaa gtaaattaag acttaaaagt 2160

gccataatta ttgatttttc acatttctat atttttgtta ataaaagatg attatataag 2220

catgttattt tattgctaaa taccttaact gtaatatcca atcagttttt aagcaacctt 2280

atatcaaatt ctcaaaaaaa aagtgttagc atataggagc ctgtgagact ccacgtccgc 2340

agtagtgtta agaaaaaatt acgtccatac ttaaaggtta agccgctaaa ggcattatcc 2400

gccaagtaca atttttact cttcgaagat agaaaatttg ctgacattgg taatacagtc 2460

aaattgcagt actctgcggg tgtatacaga atagcagaat gggcagacat tacgaatgca 2520

cacggtgtgg tgggcccagg tattgttagc ggtttgaagc aggcggcaga agaagtaaca 2580

aaggaaccta gaggcctttt gatgttagca gaattgtcat gcaagggctc cctatctact 2640

ggagaatata ctaagggtac tgttgacatt gcgaaaagcg acaaagattt tgttatcggc 2700

tttattgctc aaagagacat gggtggaaga gatgaaggtt acgattggtt gattatgaca 2760

cccggtgtgg gtttagatga caagggagat gcattgggtc aacagtatag aaccgtggat 2820

gatgttgtct ctacaggatc tgacattatt attgttggaa gaggactatt tgcaaaggga 2880

agggatgcta aggtagaggg tgaacgttac agaaaagcag gctgggaagc atatttgaga 2940

agatgcggcc agcaaaacta aaaaactgta ttataagtaa atgcatgtat actaaactca 3000

caaattagag cttcaattta attatatcag ttattaccc 3039

<210> 61
<211> 2979
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 61
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacccggcgt gattgacgct gggtcacagt gacccagcgc 420

gttttaaaac ggccatattt tttttatgag ttgatcattt gttttaaccg tttaagtagc 480

tggagttacg tccccccctct ccttagtcgg ccggtaagtt tagtgctacg tcggctgcgc 540

agcgagatac acgtgcgcca agtcaacgcg ggtaagtttg acccagcgtc atcgcgggcg 600

tcgtattttt gtggcattcc ttttttaatt aattttgttt agcttgcctc gtccccgccg 660

ggtcacccgg ccagcgacat ggaggcccag aataccctcc ttgacagtct tgacgtgcgc 720

agctcagggg catgatgtga ctgtcgcccg tacatttagc ccatacatcc ccatgtataa 780

tcatttgcat ccatacattt tgatggccgc acggcgcgaa gcaaaaatta cggctcctcg 840

ctgcagacca gcgagcaggg aaacgctccc ctcacagacg cgttgaattg tccccacgcc 900

gcgcccctgt agagaaatat aaaaggttag gatttgccac tgaggttctt ctttcatata 960

cttcctttta aaatcttgct aggatacagt tctcacatca catccgaaca taaacaacaa 1020

tgtctgttat taatttcaca ggtagttctg gtccattggt gaaagtttgc ggcttgcaga 1080

gcacagaggc cgcagaatgt gctctagatt ccgatgctga cttgctgggt attatatgtg 1140

tgcccaatag aaagagaaca attgacccgg ttattgcaag gaaaatttca agtcttgtaa 1200

aagcatataa aaatagttca ggcactccga aatacttggt tggcgtgttt cgtaatcaac 1260

ctaaggagga tgttttggct ctggtcaatg attacggcat tgatatcgtc caactgcatg 1320

gagatgagtc gtggcaagaa taccaagagt tcctcggttt gccagttatt aaaagactcg 1380

tatttccaaa agactgcaac atactactca gtgcagcttc acagaaacct cattcgttta 1440

ttcccttgtt tgattcagaa gccggtggga caggtgaact tttggattgg aactcgattt 1500

ctgactgggt tggaaggcaa gagagccccg aaagcttaca ttttatgtta gctggtggac 1560

tgacgccaga aaatgttggt gatgcgctta gattaaatgg cgttattggt gttgatgtaa 1620

gcggaggtgt ggagacaaat ggtgtaaaag actctaacaa aatagcaaat ttcgtcaaaa 1680

atgctaagaa atagtcagta ctgacaataa aaagattctt gttttcaaga acttgtcatt 1740

tgtatagttt ttttatattg tagttgttct attttaatca aatgttagcg tgatttatat 1800

ttttttttcgc ctcgacatca tctgcccaga tgcgaagtta agtgcgcaga aagtaatatc 1860

atgcgtcaat cgtatgtgaa tgctggtcgc tatactgctg tcgattcgat actaacgccg 1920

ccatccagtg tcgaaacgct atgatccaat atcaaaggat ttcttactat ttttaatata 1980

aaagtatttt tgatctctta tctataacct aagattgtta gttcctatta ttcgtaagaa 2040

aagtctatta aaattgttaa aagtagaaca aactaatgaa tgttaaattt tgaaccttga 2100

ttttgcatgt gttactttgg aaaccaataa aagtatgatt gatttaatat aatggcataa 2160

ttttatttta taacaagcgc agacgaccct ttttaacaaa taactaaaaa aaataagata 2220

acgtctttta tttcgcaaaa aatttacttt ataatgaggg gtaattgtga cccagtgtca 2280

ttgaccacgt aatttttttc acgtcaatca cgccgggtta agccgctaaa ggcattatcc 2340

gccaagtaca atttttact cttcgaagat agaaaatttg ctgacattgg taatacagtc 2400

aaattgcagt actctgcggg tgtatacaga atagcagaat gggcagacat tacgaatgca 2460

cacggtgtgg tgggcccagg tattgttagc ggtttgaagc aggcggcaga agaagtaaca 2520

aaggaaccta gaggcctttt gatgttagca gaattgtcat gcaagggctc cctatctact 2580

ggagaatata ctaagggtac tgttgacatt gcgaaaagcg acaaagattt tgttatcggc 2640

tttattgctc aaagagacat gggtggaaga gatgaaggtt acgattggtt gattatgaca 2700

cccggtgtgg gtttagatga caagggagat gcattgggtc aacagtatag aaccgtggat 2760

gatgttgtct ctacaggatc tgacattatt attgttggaa gaggactatt tgcaaaggga 2820

agggatgcta aggtagaggg tgaacgttac agaaaagcag gctgggaagc atatttgaga 2880

agatgcggcc agcaaaacta aaaaactgta ttataagtaa atgcatgtat actaaactca 2940

caaattagag cttcaattta attatatcag ttattaccc 2979

<210> 62
<211> 2920
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 62
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccctggaa tactataccg gggtactgga ttccccgggc 420

catttagttt ttctgatttt caggagatgg cagcacttat ctgattgtgc ttccaggtat 480

tctcctaact cttaagcatc tattcagttg caggtttgaa cttgttctaa gtggttgtgt 540

tttgtggtat cgctgtcttg gggcagtcaa ttccccagtg tagtgttcat gtaagtataa 600

caaattatag cttttctatc ttctataatt gagaactgat tattgatatt tattataagt 660

tgtataatgc ttttttataa ttaattatta attaataatg taaagttgat taattaatca 720

taataattgc attatttctt aattacagct ctccaaagtt tagcttgcct cgtccccgcc 780

gggtcacccg gccagcgaca tggaggccca gaataccctc cttgacagtc ttgacgtgcg 840

cagctcaggg gcatgatgtg actgtcgccc gtacatttag cccatacatc cccatgtata 900

atcatttgca tccatacatt ttgatggccg cacggcgcga agcaaaaatt acggctcctc 960

gctgcagacc agcgagcagg gaaacgctcc cctcacagac gcgttgaatt gtccccacgc 1020

cgcgcccctg tagagaaata taaaaggtta ggatttgcca ctgaggttct tctttcatat 1080

acttccttt aaaatcttgc taggatacag ttctcacatc acatccgaac ataaacaaca 1140

atgtctgtta ttaatttcac aggtagttct ggtccattgg tgaaagtttg cggcttgcag 1200

agcacagagg ccgcagaatg tgctctagat tccgatgctg acttgctggg tattatatgt 1260

gtgcccaata gaaagagaac aattgacccg gttattgcaa ggaaaatttc aagtcttgta 1320

aaagcatata aaaatagttc aggcactccg aaatacttgg ttggcgtgtt tcgtaatcaa 1380

cctaaggagg atgttttggc tctggtcaat gattacggca ttgatatcgt ccaactgcat 1440

ggagatgagt cgtggcaaga ataccaagag ttcctcggtt tgccagttat taaaagactc 1500

gtatttccaa aagactgcaa catactactc agtgcagctt cacagaaacc tcattcgttt 1560

attcccttgt ttgattcaga agccggtggg acaggtgaac ttttggattg gaactcgatt 1620

tctgactggg ttggaaggca agagagcccc gaaagcttac attttatgtt agctggtgga 1680

ctgacgccag aaaatgttgg tgatgcgctt agattaaatg gcgttattgg tgttgatgta 1740

agcggaggtg tggagacaaa tggtgtaaaa gactctaaca aaatagcaaa tttcgtcaaa 1800

aatgctaaga aatagtcagt actgacaata aaaagattct tgttttcaag aacttgtcat 1860

ttgtatagtt tttttatatt gtagttgttc tattttaatc aaatgttagc gtgatttata 1920

tttttttcg cctcgacatc atctgcccag atgcgaagtt aagtgcgcag aaagtaatat 1980

catgcgtcaa tcgtatgtga atgctggtcg ctatactgct gtcgattcga tactaacgcc 2040

gccatccagt gtcgaaacgc tatgatccaa tatcaaagga aggttattgt agtggaacag 2100

aatcctgtta atgtagtagt aagtattgta tttacatatt atcattaaag aaagtgtgag 2160

tttttacgat attattttta attattattt tccttgtggg gcatctagtt ccccagtgta 2220

gtactagtgt cgccagcaac aactgtagta ttccagggtt aagccgctaa aggcattatc 2280

cgccaagtac aatttttac tcttcgaaga tagaaaattt gctgacattg gtaatacagt 2340

caaattgcag tactctgcgg gtgtatacag aatagcagaa tgggcagaca ttacgaatgc 2400

acacggtgtg gtgggcccag gtattgttag cggtttgaag caggcggcag aagaagtaac 2460

aaaggaacct agaggccttt tgatgttagc agaattgtca tgcaagggct ccctatctac 2520

tggagaatat actaagggta ctgttgacat tgcgaaaagc gacaaagatt ttgttatcgg 2580

ctttattgct caaagagaca tgggtggaag agatgaaggt tacgattggt tgattatgac 2640

acccggtgtg ggtttagatg acaagggaga tgcattgggt caacagtata gaaccgtgga 2700

tgatgttgtc tctacaggat ctgacattat tattgttgga agaggactat ttgcaaaggg 2760

aagggatgct aaggtagagg gtgaacgtta cagaaaagca ggctgggaag catatttgag 2820

aagatgcggc cagcaaaact aaaaaactgt attataagta aatgcatgta tactaaactc 2880

acaaattaga gcttcaattt aattatatca gttattaccc 2920

<210> 63
<211> 3091
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 63
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacccggcat ccgacacatg gggtatatga aaccccaacg 420

catgaaaaac gttcagtacg gattaatact tcgggtctat cgggtgctgc gtcctagtag 480

ctttaagtga tacattaatc catacatatc gcttctcagt acacttgacc ggttggcgta 540

atatcgagta ggcgtgtttc aaagtcgtct ggatttatca caccccacct gtcgaatctt 600

taaactttta aacggtttca ttgtgtttta taataaatat tttataattt tgctgcttag 660

ataaggtaag tgattttact tttagttatg gtgatttgga ttttgtctag ttgcacactg 720

ttttatctct attttagtaa ttaatataat aatatagttt agcttgcctc gtccccgccg 780

ggtcacccgg ccagcgacat ggaggcccag aataccctcc ttgacagtct tgacgtgcgc 840

agctcagggg catgatgtga ctgtcgcccg tacatttagc ccatacatcc ccatgtataa 900

tcatttgcat ccatacattt tgatggccgc acggcgcgaa gcaaaaatta cggctcctcg 960

ctgcagacca gcgagcaggg aaacgctccc ctcacagacg cgttgaattg tccccacgcc 1020

gcgcccctgt agagaaatat aaaaggttag gatttgccac tgaggttctt ctttcatata 1080

cttcctttta aaatcttgct aggatacagt tctcacatca catccgaaca taaacaacaa 1140

tgtctgttat taatttcaca ggtagttctg gtccattggt gaaagtttgc ggcttgcaga 1200

gcacagaggc cgcagaatgt gctctagatt ccgatgctga cttgctgggt attatatgtg 1260

tgcccaatag aaagagaaca attgacccgg ttattgcaag gaaaatttca agtcttgtaa 1320

aagcatataa aaatagttca ggcactccga aatacttggt tggcgtgttt cgtaatcaac 1380

ctaaggagga tgttttggct ctggtcaatg attacggcat tgatatcgtc caactgcatg 1440

gagatgagtc gtggcaagaa taccaagagt tcctcggttt gccagttatt aaaagactcg 1500

tatttccaaa agactgcaac atactactca gtgcagcttc acagaaacct cattcgttta 1560

ttcccttgtt tgattcagaa gccggtggga caggtgaact tttggattgg aactcgattt 1620

ctgactgggt tggaaggcaa gagagccccg aaagcttaca ttttatgtta gctggtggac 1680

tgacgccaga aaatgttggt gatgcgctta gattaaatgg cgttattggt gttgatgtaa 1740

gcggaggtgt ggagacaaat ggtgtaaaag actctaacaa aatagcaaat ttcgtcaaaa 1800

atgctaagaa atagtcagta ctgacaataa aaagattctt gttttcaaga acttgtcatt 1860

tgtatagttt ttttatattg tagttgttct attttaatca aatgttagcg tgatttatat 1920

ttttttcgc ctcgacatca tctgcccaga tgcgaagtta agtgcgcaga aagtaatatc 1980

atgcgtcaat cgtatgtgaa tgctggtcgc tatactgctg tcgattcgat actaacgccg 2040

ccatccagtg tcgaaacgct atgatccaat atcaaaggat atgtggtaac atattgtaaa 2100

aattgtagtg acttgagttc cacagcatat gaataaaatg gtattattat ttaatattat 2160

tattaattaa tttactttac ttatgctggt tgcgcgaaat ttatctttca tttttcatac 2220

aaacccaatg taggacaata aacatttttt tttactataa attaaattaa tcgttatttg 2280

acatcatatc aacaacaagt cccaccagaa atctaagaaa taagtcccag aaataacaaa 2340

taaattcaaa taaaccgttg tttgagttgg ggtatatagc accccacctg tcacaaattg 2400

tcacaaaaat tcacatgtcg gatgccgggt taagccgcta aaggcattat ccgccaagta 2460

caatttttta ctcttcgaag atagaaaatt tgctgacatt ggtaatacag tcaaattgca 2520

gtactctgcg ggtgtataca gaatagcaga atgggcagac attacgaatg cacacggtgt 2580

ggtgggccca ggtattgtta gcggtttgaa gcaggcggca gaagaagtaa caaaggaacc 2640

tagaggcctt ttgatgttag cagaattgtc atgcaagggc tccctatcta ctggagaata 2700

tactaagggt actgttgaca ttgcgaaaag cgacaaagat tttgttatcg gctttattgc 2760

tcaaagagac atgggtggaa gagatgaagg ttacgattgg ttgattatga cacccggtgt 2820

gggtttagat gacaagggag atgcattggg tcaacagtat agaaccgtgg atgatgttgt 2880

ctctacagga tctgacatta ttattgttgg aagaggacta tttgcaaagg gaagggatgc 2940

taaggtagag ggtgaacgtt acagaaaagc aggctgggaa gcatatttga gaagatgcgg 3000

ccagcaaaac taaaaaactg tattataagt aaatgcatgt atactaaact cacaaattag 3060

agcttcaatt taattatatc agttattacc c 3091

<210> 64
<211> 3168

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 64
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacctttaaa aggtaacgtg ggggtggaaa tacccccact 420

tctaaaaaaa gaggtatatt ttttgtcagg agttggcagc agtcgtgtag ttccaggtac 480

cttcctgtga ccttgaagac agtctgtatt cagtagagtc tcagtgctga cacatcctgt 540

ttattcaaca taacctccaa aagtgcttgg ggagtctctg tacccccacg ttacccgttg 600

tgtcagcaca tttcaccgca tccattcttc tatttctttt ataaaagtaa gtatattata 660

gtttttttctg acttgaataa ctagaattgt agttgttata acctaaccta taaactcaca 720

ttaaatttgg ccttcgtaaa cataaactaa cctggatgtg tgttacatag caatttcatc 780

atgtacgact tgcctttaca gttattgtat tattttgtca cattctaaac tcgtttgtgc 840

tttgcagagt ttagcttgcc tcgtccccgc cgggtcaccc ggccagcgac atggaggccc 900

agaataccct ccttgacagt cttgacgtgc gcagctcagg ggcatgatgt gactgtcgcc 960

cgtacattta gcccatacat ccccatgtat aatcatttgc atccatacat tttgatggcc 1020

gcacggcgcg aagcaaaaat tacggctcct cgctgcagac cagcgagcag ggaaacgctc 1080

ccctcacaga cgcgttgaat tgtccccacg ccgcgcccct gtagagaaat ataaaaggtt 1140

aggatttgcc actgaggttc ttctttcata tacttccttt taaaatcttg ctaggataca 1200

gttctcacat cacatccgaa cataaacaac aatgtctgtt attaatttca caggtagttc 1260

tggtccattg gtgaaagttt gcggcttgca gagcacagag gccgcagaat gtgctctaga 1320

ttccgatgct gacttgctgg gtattatatg tgtgcccaat agaaagagaa caattgaccc 1380

ggttattgca aggaaaattt caagtcttgt aaaagcatat aaaaatagtt caggcactcc 1440

gaaatacttg gttggcgtgt ttcgtaatca acctaaggag gatgttttgg ctctggtcaa 1500

tgattacggc attgatatcg tccaactgca tggagatgag tcgtggcaag aataccaaga 1560

gttcctcggt ttgccagtta ttaaaagact cgtatttcca aaagactgca acatactact 1620

cagtgcagct tcacagaaac ctcattcgtt tattcccttg tttgattcag aagccggtgg 1680

gacaggtgaa cttttggatt ggaactcgat ttctgactgg gttggaaggc aagagagccc 1740

cgaaagctta cattttatgt tagctggtgg actgacgcca gaaaatgttg gtgatgcgct 1800

tagattaaat ggcgttattg gtgttgatgt aagcggaggt gtggagacaa atggtgtaaa 1860

agactctaac aaaatagcaa atttcgtcaa aaatgctaag aaatagtcag tactgacaat 1920

aaaaagattc ttgttttcaa gaacttgtca tttgtatagt ttttttatat tgtagttgtt 1980

ctattttaat caaatgttag cgtgatttat atttttttc gcctcgacat catctgccca 2040

gatgcgaagt taagtgcgca gaaagtaata tcatgcgtca atcgtatgtg aatgctggtc 2100

gctatactgc tgtcgattcg atactaacgc cgccatccag tgtcgaaacg ctatgatcca 2160

atatcaaagg actttgggtt gtataaaatg tccactcgtt gtagtttttt tttgtattaa 2220

cattaattaa taaataatat tataacactt ttagatatta ttgtaagttt ttttttccta 2280

taaaatactg tacattttag atatttgtga aaaaaactca tacacaaaac taaaaaaaaa 2340

agaaaaatga ttttttttatg attcttgaag tttttcctaa caaaataaac atctaaatta 2400

aatcaaaggt ccataatgtc ttaagtaaat agaaaaaata aatgggggta atcagacacc 2460

ccacgttacc atttatattc tactttccca tgttacccat taaaggttaa gccgctaaag 2520

gcattatccg ccaagtacaa ttttttactc ttcgaagata gaaaatttgc tgacattggt 2580

aatacagtca aattgcagta ctctgcgggt gtatacagaa tagcagaatg ggcagacatt 2640

acgaatgcac acggtgtggt gggcccaggt attgttagcg gtttgaagca ggcggcagaa 2700

gaagtaacaa aggaacctag aggccttttg atgttagcag aattgtcatg caagggctcc 2760

ctatctactg gagaatatac taagggtact gttgacattg cgaaaagcga caaagatttt 2820

gttatcggct ttattgctca aagagacatg ggtggaagag atgaaggtta cgattggttg 2880

attatgacac ccggtgtggg tttagatgac aagggagatg cattgggtca acagtataga 2940

accgtggatg atgttgtctc tacaggatct gacattatta ttgttggaag aggactattt 3000

gcaaagggaa gggatgctaa ggtagagggt gaacgttaca gaaaagcagg ctgggaagca 3060

tatttgagaa gatgcggcca gcaaaactaa aaaactgtat tataagtaaa tgcatgtata 3120

ctaaactcac aaattagagc ttcaatttaa ttatatcagt tattaccc 3168

<210> 65
<211> 2918
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 65
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aacctttcag tacacgcgcg cggaccgtca ctccgcaaaa 420

ttcaaacggt ttaatttgcc cgtggcgcca tctgttgttg agttgacaag tctcttttcc 480

acgtcatccg tagaccgcgt gtgcatttca ctgtttactg tttgacagag agtacgaagt 540

aaatagttgt tgttaatagt aaatagttgt tcttgtttta tattattatt aagtagattt 600

tagttagtgt tagttagtaa tagtgttttg tgtttagtaa agacttaata gtagtgtaag 660

taaataggtt attgtggagt attgtttggt taaaacaggt aaataaaagt acgatttcat 720

taaattgttg tcttgagttt agcttgcctc gtccccgccg ggtcacccgg ccagcgacat 780

ggaggcccag aataccctcc ttgacagtct tgacgtgcgc agctcagggg catgatgtga 840

ctgtcgcccg tacatttagc ccatacatcc ccatgtataa tcatttgcat ccatacattt 900

tgatggccgc acggcgcgaa gcaaaaatta cggctcctcg ctgcagacca gcgagcaggg 960

aaacgctccc ctcacagacg cgttgaattg tccccacgcc gcgcccctgt agagaaatat 1020

aaaaggttag gatttgccac tgaggttctt ctttcatata cttcctttta aaatcttgct 1080

aggatacagt tctcacatca catccgaaca taaacaacaa tgtctgttat taatttcaca 1140

ggtagttctg gtccattggt gaaagtttgc ggcttgcaga gcacagaggc cgcagaatgt 1200

gctctagatt ccgatgctga cttgctgggt attatatgtg tgcccaatag aaagagaaca 1260

attgacccgg ttattgcaag gaaaatttca agtcttgtaa aagcatataa aaatagttca 1320

ggcactccga aatacttggt tggcgtgttt cgtaatcaac ctaaggagga tgttttggct 1380

ctggtcaatg attacggcat tgatatcgtc caactgcatg gagatgagtc gtggcaagaa 1440

taccaagagt tcctcggttt gccagttatt aaaagactcg tatttccaaa agactgcaac 1500

atactactca gtgcagcttc acagaaacct cattcgttta ttcccttgtt tgattcagaa 1560

gccggtggga caggtgaact tttggattgg aactcgattt ctgactgggt tggaaggcaa 1620

gagagccccg aaagcttaca ttttatgtta gctggtggac tgacgccaga aaatgttggt 1680

gatgcgctta gattaaatgg cgttattggt gttgatgtaa gcggaggtgt ggagacaaat 1740

ggtgtaaaag actctaacaa aatagcaaat ttcgtcaaaa atgctaagaa atagtcagta 1800

ctgacaataa aaagattctt gttttcaaga acttgtcatt tgtatagttt ttttatattg 1860

tagttgttct attttaatca aatgttagcg tgatttatat ttttttttcgc ctcgacatca 1920

tctgcccaga tgcgaagtta agtgcgcaga aagtaatatc atgcgtcaat cgtatgtgaa 1980

tgctggtcgc tatactgctg tcgattcgat actaacgccg ccatccagtg tcgaaacgct 2040

atgatccaat atcaaaggaa tatattttga taatttttttt aaatgtataa atttattcaa 2100

ttaatttcat actcatataa aaaccaaaaa aaaaaattaa attttataat ttttctagcg 2160

ccatctttcg cctggtggca aaaatatatt ttaatgcgga ctctcagtcc ggcgcgtgta 2220

atcttgtgtg tattaaaaac cgcgtgtact ggaaggttaa gccgctaaag gcattatccg 2280

ccaagtacaa ttttttactc ttcgaagata gaaaatttgc tgacattggt aatacagtca 2340

aattgcagta ctctgcgggt gtatacagaa tagcagaatg ggcagacatt acgaatgcac 2400

acggtgtggt gggcccaggt attgttagcg gtttgaagca ggcggcagaa gaagtaacaa 2460

aggaacctag aggccttttg atgttagcag aattgtcatg caagggctcc ctatctactg 2520

gagaatatac taagggtact gttgacattg cgaaaagcga caaagatttt gttatcggct 2580

ttattgctca aagagacatg ggtggaagag atgaaggtta cgattggttg attatgacac 2640

ccggtgtggg tttagatgac aagggagatg cattgggtca acagtataga accgtggatg 2700

atgttgtctc tacaggatct gacattatta ttgttggaag aggactattt gcaaagggaa 2760

gggatgctaa ggtagagggt gaacgttaca gaaaagcagg ctgggaagca tatttgagaa 2820

gatgcggcca gcaaaactaa aaaactgtat tataagtaaa tgcatgtata ctaaactcac 2880

aaattagagc ttcaatttaa ttatatcagt tattaccc 2918

<210> 66
<211> 2866
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 66
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aaccccttaa cctacgattc acgttcgagt gtttcgggcc 420

cgaaacgtaa acaaattcgc gcaaccttcg agccattcgc gcgacttgtg tagtacgctg 480

atcgagccta ttatctcttc gtatcgtgat cagtttcaag ttattcttgg tcactttcgc 540

acatcgaaat ttactctcat aaattctaga gaagcagtcc cacaaggttt agcttgcctc 600

gtccccgccg ggtcacccgg ccagcgacat ggaggcccag aataccctcc ttgacagtct 660

tgacgtgcgc agctcagggg catgatgtga ctgtcgcccg tacatttagc ccatacatcc 720

ccatgtataa tcatttgcat ccatacattt tgatggccgc acggcgcgaa gcaaaaatta 780

cggctcctcg ctgcagacca gcgagcaggg aaacgctccc ctcacagacg cgttgaattg 840

tccccacgcc gcgcccctgt agagaaatat aaaaggttag gatttgccac tgaggttctt 900

ctttcatata cttcctttta aaatcttgct aggatacagt tctcacatca catccgaaca 960

taaacaacaa tgtctgttat taatttcaca ggtagttctg gtccattggt gaaagtttgc 1020

ggcttgcaga gcacagaggc cgcagaatgt gctctagatt ccgatgctga cttgctgggt 1080

attatatgtg tgcccaatag aaagagaaca attgacccgg ttattgcaag gaaaatttca 1140

agtcttgtaa aagcatataa aaatagttca ggcactccga aatacttggt tggcgtgttt 1200

cgtaatcaac ctaaggagga tgttttggct ctggtcaatg attacggcat tgatatcgtc 1260

caactgcatg gagatgagtc gtggcaagaa taccaagagt tcctcggttt gccagttatt 1320

aaaagactcg tatttccaaa agactgcaac atactactca gtgcagcttc acagaaacct 1380

cattcgttta ttcccttgtt tgattcagaa gccggtggga caggtgaact tttggattgg 1440

aactcgattt ctgactgggt tggaaggcaa gagagccccg aaagcttaca ttttatgtta 1500

gctggtggac tgacgccaga aaatgttggt gatgcgctta gattaaatgg cgttattggt 1560

gttgatgtaa gcggaggtgt ggagacaaat ggtgtaaaag actctaacaa aatagcaaat 1620

ttcgtcaaaa atgctaagaa atagtcagta ctgacaataa aaagattctt gttttcaaga 1680

acttgtcatt tgtatagttt ttttatattg tagttgttct attttaatca aatgttagcg 1740

tgatttatat ttttttcgc ctcgacatca tctgcccaga tgcgaagtta agtgcgcaga 1800

aagtaatatc atgcgtcaat cgtatgtgaa tgctggtcgc tatactgctg tcgattcgat 1860

actaacgccg ccatccagtg tcgaaacgct atgatccaat atcaaaggaa ctttttgtag 1920

tacttgcatc taccacaatt attgcatcaa gctgtaatta catatcaaat attccaaaaa 1980

tgtttataat tttaagaggg cgccgccgct aatatttata tttgacccga tcatcgtact 2040

acgggctatg cccgtaatat tcacttctgg cccgatcatc gtacacgggc tatgcccgta 2100

atatttacgt ttggcccgat cagcgtacac gggctatgcc cgtaatattt atttttggcc 2160

cgatcaacgt acacgggctc tgctcgtagt tgtaggttaa ggggttaagc cgctaaaggc 2220

attatccgcc aagtacaatt ttttactctt cgaagataga aaatttgctg acattggtaa 2280

tacagtcaaa ttgcagtact ctgcgggtgt atacagaata gcagaatggg cagacattac 2340

gaatgcacac ggtgtggtgg gcccaggtat tgttagcggt ttgaagcagg cggcagaaga 2400

agtaacaaag gaacctagag gccttttgat gttagcagaa ttgtcatgca agggctccct 2460

atctactgga gaatatacta agggtactgt tgacattgcg aaaagcgaca aagattttgt 2520

tatcggcttt attgctcaaa gagacatggg tggaagagat gaaggttacg attggttgat 2580

tatgacaccc ggtgtgggtt tagatgacaa gggagatgca ttgggtcaac agtatagaac 2640

cgtggatgat gttgtctcta caggatctga cattattatt gttggaagag gactatttgc 2700

aaagggaagg gatgctaagg tagagggtga acgttacaga aaagcaggct gggaagcata 2760

tttgagaaga tgcggccagc aaaactaaaa aactgtatta taagtaaatg catgtatact 2820

aaactcacaa attagagctt caatttaatt atatcagtta ttaccc 2866

<210> 67
<211> 3047
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 67
ttgattcggt aatctccgaa cagaaggaag aacgaaggaa ggagcacaga cttagattgg 60

tatatatacg catatgtagt gttgaagaaa catgaaattg cccagtattc ttaacccaac 120

tgcacagaac aaaaaccagc aggaaacgaa gataaatcat gtcgaaagct acatataagg 180

aacgtgctgc tactcatcct agtcctgttg ctgccaagct atttaatatc atgcacgaaa 240

agcaaacaaa cttgtgtgct tcattggatg ttcgtaccac caaggaatta ctggagttag 300

ttgaagcatt aggtcccaaa atttgtttac taaaaacaca tgtggatatc ttgactgatt 360

tttccatgga gggcacagtt aagagacatt actaaacgaa aggcagtttt tctttacaca 420

cacacacaca cacacacaaa aaacaacaac tttgatgcag acttttgcct ggttcaggaa 480

tcgcgttcga gtaatgaaga ttacaacttc tggaaatcgc aatggggcga ggactcatgg 540

atgtcccatg gaaacagcca ttcagctgga actctaactc ttatattatg tttatggtca 600

atttgaccgg atttcaattt ttgtgttgat caaagcgcct ggttatcctt taaatttaaa 660

aatgtccttt tggtttactt tattttgata acttctgaag agtcattcag caccaggtgt 720

gtgtgaaaga ggaactttct ctccactgtc ctgtacacta tttccatgcc ctttctttga 780

gaaatagacc aaaagtttag cttgcctcgt ccccgccggg tcacccggcc agcgacatgg 840

aggcccagaa taccctcctt gacagtcttg acgtgcgcag ctcaggggca tgatgtgact 900

gtcgcccgta catttagccc atacatcccc atgtataatc atttgcatcc atacattttg 960

atggccgcac ggcgcgaagc aaaaattacg gctcctcgct gcagaccagc gagcagggaa 1020

acgctcccct cacagacgcg ttgaattgtc cccacgccgc gcccctgtag agaaatataa 1080

aaggttagga tttgccactg aggttcttct ttcatatact tccttttaaa atcttgctag 1140

gatacagttc tcacatcaca tccgaacata aacaacaatg tctgttatta atttcacagg 1200

tagttctggt ccattggtga aagtttgcgg cttgcagagc acagaggccg cagaatgtgc 1260

tctagattcc gatgctgact tgctgggtat tatatgtgtg cccaatagaa agagaacaat 1320

tgacccggtt attgcaagga aaatttcaag tcttgtaaaa gcatataaaa atagttcagg 1380

cactccgaaa tacttggttg gcgtgtttcg taatcaacct aaggaggatg ttttggctct 1440

ggtcaatgat tacggcattg atatcgtcca actgcatgga gatgagtcgt ggcaagaata 1500

ccaagagttc ctcggtttgc cagttattaa aagactcgta tttccaaaag actgcaacat 1560

actactcagt gcagcttcac agaaacctca ttcgtttatt cccttgtttg attcagaagc 1620

cggtgggaca ggtgaacttt tggattggaa ctcgatttct gactgggttg gaaggcaaga 1680

gagccccgaa agcttacatt ttatgttagc tggtggactg acgccagaaa atgttggtga 1740

tgcgcttaga ttaaatggcg ttattggtgt tgatgtaagc ggaggtgtgg agacaaatgg 1800

tgtaaaagac tctaacaaaa tagcaaattt cgtcaaaaat gctaagaaat agtcagtact 1860

gacaataaaa agattcttgt tttcaagaac ttgtcatttg tatagttttt ttatattgta 1920

gttgttctat tttaatcaaa tgttagcgtg atttatattt tttttcgcct cgacatcatc 1980

tgcccagatg cgaagttaag tgcgcagaaa gtaatatcat gcgtcaatcg tatgtgaatg 2040

ctggtcgcta tactgctgtc gattcgatac taacgccgcc atccagtgtc gaaacgctat 2100

gatccaatat caaaggaaaa tgtcaaacat tgaaaaaccc caaaaaacag gcaagttaaa 2160

tagttaaaga aaaagtgtta ataattaaaa tcagaagttg cttaatatag tattgaaatt 2220

agtttgttta ttcttctcat gtctcctaaa tgtttgcata atctaagata aagttattat 2280

tgggttaaat taatttcctg tctgttttgt gttgatttac acaatgcagg tcaaaattac 2340

ccgcaacata acaaatgtat ttttttttctc aacataatac aaggattaag ccgctaaagg 2400

cattatccgc caagtacaat tttttactct tcgaagatag aaaatttgct gacattggta 2460

atacagtcaa attgcagtac tctgcgggtg tatacagaat agcagaatgg gcagacatta 2520

cgaatgcaca cggtgtggtg ggcccaggta ttgttagcgg tttgaagcag gcggcagaag 2580

aagtaacaaa ggaacctaga ggccttttga tgttagcaga attgtcatgc aagggctccc 2640

tatctactgg agaatatact aagggtactg ttgacattgc gaaaagcgac aaagattttg 2700

ttatcggctt tattgctcaa agagacatgg gtggaagaga tgaaggttac gattggttga 2760

ttatgacacc cggtgtgggt ttagatgaca agggagatgc attgggtcaa cagtatagaa 2820

ccgtggatga tgttgtctct acaggatctg acattattat tgttggaaga ggactatttg 2880

caaagggaag ggatgctaag gtagagggtg aacgttacag aaaagcaggc tgggaagcat 2940

atttgagaag atgcggccag caaaactaaa aaactgtatt ataagtaaat gcatgtatac 3000

taaactcaca aattagagct tcaatttaat tatatcagtt attaccc 3047

<210> 68
<211> 572
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 68
ttaaccgtct gcagctgacg tgtagtccca cagacaccgc gaaatacaaa atcacgtgtt 60

ataccgtcat ttttcaaata tgagcgtcac tgctgcgagt accttactgt atagtgctcg 120

cgcgtcggtc agtgtgcggc ggggggtcgc agcgagcgca cgtgtgcgta gcggagggaa 180

ggtgtccacg agactaccac gtcagcgtta aggtaagtgt ccacgagatt accacttcag 240

tgaaatggtt atatcttcat agtgtctcct aaacaaccac gtcagtcatt gagtttcaat 300

gatttattat tttatgttat tttccaattt tcataaacta tttatactac tattttatta 360

ctacttatac tacttacaat taggacagat ttctactttt gtttgtaatc aattaacttg 420

aatacaaagc cgtttattta acatacaaac aacataacaa tacataataa tgttatctct 480

gagtaacaca ggttacagga aacaatatct atacagcacc cgcgtgtgct taagtcgtgc 540

tagaaaacta acagtattta acttgttttt ag 572

<210> 69
<211> 388
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 69
ttttgaaact ctctagtttt taagttgacc aacgaatgta tctcaatttt cctagactga 60

ttaatgttat tgtgaacttt taaaatgtat aatgtgaaat ttgaaaaatt tgattttgtt 120

atttttttat gtcataaatg tttaagaaga aatttataga ctgatttgtg ttaagtaaat 180

aaaccttgtt taattttgaa aatagatatt gttttttttt ttatttcaat taaatataaa 240

atataaaaag gcaagaaatc taacaaacat gaataaatta gctgcatatt ttaattctaa 300

aaaaatattt gctgttgaaa tggtgtctgg tatactacca cctcagttga attgtaacaa 360

tttaaccacg tcagttgcag agggttaa 388

<210> 70
<211> 378
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 70
ttaaccctta attggtcgcg tggggtgtca tacaccccag agcgggttcc caggcgcaca 60

acttttaaa atttgaattt agcgcgctgc tcttctaggt agcttcgtaa acacgtaaaa 120

cgtacatgat tcagttgcga gcggcgctcg gttgtggacg gttgagctca gagagtgtgt 180

ttggggtgca cgacacccca ggtgactgtt tgtgtggtct aaattccgag taagtaaata 240

gttgttaatt ttattatttc cgttttaaaa cattgtattt tgcaagtgat gaatgttaaa 300

agtgttcaat tataataatt tgacattttt gaggttatgt tgtgatattt ttgtttttgg 360

ttttcagtaa aatcaaaa 378

<210> 71
<211> 220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 71
aactaggttt tgtaaaaaat attttttata ttaaaaaaat aagttgatta tattaaaaat 60

atgtttaaaa gttaattaat atgtaagtta aaatgttcga attaatacaa gtgtgatttt 120

gcatgtattt agtattttat tttatttcct aattctgggg tgctaagcac cccacgcgac 180

cgcttatgca actttgtagg cgcgcccaat taagggttaa 220

<210> 72
<211> 455
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 72
ttaacacgtt cactgccggt gtcaacacgt agttgacaca cgtacattcg ccggtggcca 60

ctgtcaatac gttgttgaca ccaaaactat ccatttttaa tatattgtca cggggtcggc 120

ttttatcgca tgttatttat ttatttatta atagattcga tagcccgtgt aaaattgaat 180

ggtatagttg gattcatttt tcgaattatt tatagaatat ttttcctaat tattattttc 240

gttgatatta tttaatatct taatatataa tacacatata ccaaattatt attgttgaaa 300

tattacacag ttttatcttt tatgtttgac agtcattctt caacgtgcgt acattgtcgt 360

agtcagtcgt agtcactaga attgatatta ttttgtgtgt gttttttaa gtacatttaa 420

aattgttcat tttaatccta catagtgata gtata 455

<210> 73
<211> 439
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 73
attaaaaatt atgtttattg ttttatttat atttatactt atttgtaagt taaaaactac 60

agtttaattc aataagtagt atttttttat tttatttcat tttattaaat attaaaaata 120

aatctataca aaaaaaaagt tgaattttca ttttacattt ttgtgtaacc gctgtgttgt 180

agtacaaatt gaaaaaaacc aaagtactta taaactcaat agtatcgtaa tattattgaa 240

aaacataatt gtaagtgtga tgtatgataa tttatcaagt atttatttag atataattgt 300

ggattcttat ttattattag catgaatcgg gcgcgcaacg ccggtgtcaa cacgtagttg 360

acagtatcag ccgagactgg tttttggtta cggctacgcg cgcgctaatg cataattcgg 420

tcggcagtga acgtgttaa 439

<210> 74
<211> 286
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 74
ttaacactcc accgcacgcg cgtctactat tgtagactgc agaatttagt tacgcaatat 60

ttacaacatt catgtaagag aagttgcctg ttttcgtgta ttcctcaaaa atgacaccct 120

taacgtattt agttggtttt caaacgcggt tgctagtgta tcgtcgagtt tttttgttat 180

ttctacgatt gtagagcacg cgtgttctcc cgtaactaat tctgttaccg cgtaagtatg 240

caatttaagc gttatttatg ggtttttcgt tatgttacat ttttag 286

<210> 75
<211> 204
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 75
cttgaagata tattttattt tactccatac tataccttat tttcttttga tttctataaa 60

taaagttgtt ataagtatat ctaatacttt ttattatcag aaatggaaaa taaataaaga 120

ttctaataag acgcgaatgt tctactattg tagtacatgc gtgttttgtt gtatgaaaaa 180

ggggcgcgtg cggtggagtg ttaa 204

<210> 76
<211> 365
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 76
ttaaccctag aatgcacgac tggggtcgat ttcgacccca ggcaaacttt gaactatata 60

cgctcctgtt cgactaactc tctaaaagta cgggctacgt cgggcgcagc gttagttgtt 120

cgctggcagt gacgcagcac cgtcgcaaag cgtgcgtggg gtcgatattg accccagttg 180

tgagtttccg tttgtgtttt gtcacggtaa gctaatttta tatttttgc tagaatcaat 240

atatttcatg tattattacg taatctgagc ataaatagtc ataaatatta tttaagacaa 300

aatatctcac gacttagtcg gtaaaaatcc cgttgcctac agataagatt gacattttgc 360

agaaa 365

<210> 77
<211> 529
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 77
tgcgactaaa taagtatttt tcatttttt tcatattttt tactattttg tatcaaatta 60

aattaaaata atacttaaaa tacaattttt tatggttttt tcatcgattt tttccatatt 120

tcaactttgc gaatttcttc atttttataa tcttaaataa atatactttt tgaacagaac 180

ataacgatga caatttttt ccaattgtct aatgtgtcct cttcaaagtt tgaattttga 240

aaattggttg attacaaaaa aagatacaaa tttttgtttt aaaaaagagg tttttgctga 300

ttttctgcat ttttcggtct tcaaatggat ttttcactaa ctaaacttga gtaaaattaa 360

atttatcgta tactattctc ttttttatta aaaaacgaag aaatttatgt actattaagg 420

ccctttatct ctgtaggacc ggttttacga tcaaaaaagc gttgagtcga tattgacccc 480

agttatgagt taaaaggtaa aaaaaatgac ttgtgcgttc tagggttaa 529

<210> 78
<211> 354
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 78
ttaaccctac agtggtcgcg cggatgacac ttgtcatcca ccacttttaa tttgctgata 60

gagttggtat aggtttaggt ggggaactgt ggttcccaat agctgcttat tatgtatacg 120

catgtggtat gaacgagtag ttttgaattg atttttagta ataaggctcc tagtgtgagt 180

taaagttacc cggaggacag gtgtcatcca cgcgaccatt gacgttagtg ttggtttcat 240

agacactgtg tatattttcc accatttctc atcgctgaag gtaccaatgc agtttatatt 300

ttacattagt tcaacacagc attttaggat ccatattgga ggaaattttc agct 354

<210> 79
<211> 214
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 79
cttgtaaaat aactatcatg tatgtaataa aaatattttt tgagttctgt tggtaattaa 60

tactttctct ataccatcag taataaattc tgattacctt gtaacacaaa aagatattaa 120

atccgtaaag tggccctaaa caaactgtgg atgaccactg tcatccgcgc gattatgccc 180

gtcctaaaca ttgacgcgac cgctgcaggg ttaa 214

<210> 80
<211> 253
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 80
ttaacccgcg agaactcgca ccgggtataa catgcccgat ccattttcat tcaaagtttt 60

tcttactttc ttctattgga acagagccag gatttcgtgt agctgtattc aaggtcacat 120

tctttcacta ggggaaaagc tggttttgtt ctataaatag attttcagga acaggtgtcg 180

ggggtatgtc atacccgtgc tagtcctggc gtcagtcgga tcattccttc tttttctctc 240

agtttagtga att 253

<210> 81
<211> 185
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 81
acatgtgagt atgtattttt aaactcaata aaattcttta atgtattatt ttgtaatgtt 60

taattatgta aggcttgctt ataaacagta ttatttcata tttaggtagc agaaatgaac 120

tagggtatga gatacccagc gcgagttctc gcgttggaaa acggttgcgt gttctcccgg 180

gttaa 185

<210> 82
<211> 411
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 82
ttaaccctag ataactaaac attcgtccgc tcgacgacgc gctatgccgc gaaattgaag 60

tttacctatt attccgcgtc ccccgccccc gccgcttttt ctagcttcct gatttgcaaa 120

atagtgcatc gcgtgacacg ctcgaggtca cacgacaatt aggtcgaaag ttacaggaat 180

ttcgtcgtcc gctcgacgaa agtttagtaa ttacgtaagt ttggcaaagg taagtgaatg 240

aagtattttt ttataattat tttttaattc tttatagtga taacgtaagg tttatttaaa 300

tttattactt ttatagttat ttagccaatt gttataaatt ccttgttatt gctgaaaaat 360

ttgcctgttt tagtcaaaat ttattaactt ttcgatcgtt ttttaggcct a 411

<210> 83
<211> 184
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 83
tcatctttca ctaagtaatt ttgttcctat ttagtagata agtaacacat aattattgtg 60

atattcaaaa cttaagaggt ttaataaata ataataaaaa aaaaatggtt tttatttcgt 120

agtctgctcg acgaatgttt agttattacg taaccgtgaa tatagtttag tagtctaggg 180

ttaa 184

<210> 84
<211> 331

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 84
ttaaccctag aagcccaatc tacgtcattc tgacgtgtat gtcgccgaaa atactctgtc 60

tctttctcct gcacgatcgg attgccgcga acgctcgatt caacccagtt ggcgccgaga 120

tctattggag gactgcggcg ttgattcggt aagtcccgcc attttgtcat agtaacagta 180

ttgcacgtca gcttgacgta tatttgggct ttgtgttatt tttgtaaatt ttcaacgtta 240

gtttattatt gcatcttttt gttacattac tggtttattt gcatgtatta ctcaaatatt 300

atttttattt tagcgtagaa aatacagcct a 331

<210> 85
<211> 375
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 85
tcatcagact gtttttttg tatttgcatt atatattata ttctaaagtt gatttaattc 60

taagaaaaac attaaaataa gtttcttttt gtaaaattta attaattata agaaaaagtt 120

taagttgatc tcatttttta taaaaatttg caatgtttcc aaagttatta ttgtaaaaga 180

ataaataaaa gtaaactgag ttttaattga tgttttatta tatcattata ctatatatta 240

cttaaataaa acaataactg aatgtatttc taaaaggaat cactagaaaa tatagtgatc 300

aaaaatttac acgtcatttt tgcgtatgat tgggctttat aggttctaaa aatatgattg 360

ggcctctagg gttaa 375

<210> 86
<211> 433
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 86
ttaaccctca aatggttttt ggggtccatt ggaccccaga ggcaaattag aaaccatttg 60

caggggggcat gtgtacaata gcaggccaat atttttggag aattactttt tctatggctt 120

ttctatgccc atagaaactc aattgtgtga caggtttaat atcttgaata attggactta 180

ttcggttgaa tgaattctgg ggtccaaggg accccagaca agcaagccca taatattgtt 240

gtgatatcta tggttgatgc ccagtcatat aaatatgatt ccacaaagca actctcacga 300

ctattttatg tctgctgcct accgcaactg acttgtgtgt tctaacggca atcagcttca 360

gttgataagt tcaactatcg cgtacaactc tggcaacttt gtcaatccgc cactgaaagc 420

gctgccgaca ctg 433

<210> 87
<211> 531
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 87
cttgctgtac gagcatcatt tctgctattt caaagttatt acaattcaga acttgctaca 60

aaattgcctt taacacttga gcaagatgag ctgatagcat aactggctat aatacaacat 120

atacatacca tatatacata ttacatactt ataataagta atctcaaaaa tttaatctca 180

aatctcaaaa tctaaatttt ccataactta tcataagcac agagctatgt gcaagttctg 240

attgtacact ttttgcagct tcttttaatt gctcagcatc atgaatttgt acttacatgt 300

aaatatgact atcgcctaat tttcatgtaa ctgtcatctg tgtgcaaaca cctgttctgt 360

gctttgcaaa cacctgtact taataaagtc aaataataat taatattaaa attaatagtc 420

aaataaacta cacaaataat ctgttgtgct cagcatcaga ttctgaatgg ggtccattgg 480

accccagaaa aaagaaacag actatttttt ctttaactgt ttgagggtta a 531

<210> 88
<211> 837

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 88
ttaaccagtt aaccgtgttt gacgactata tccgtcatgg agatttggca gaattttgtg 60

ccatgacgac tttatccgtc atgtgtaaaa ttttgttaca attcgatatt taaattgtag 120

ttctggagaa aattaaattt tattcctaaa ttttaatatg tttaaaatgt tcagaggtca 180

caacgaaatg aaacaagcaa ataaaaatta taaataattt aagttgattc ataacggtct 240

gagagctaac tcgtgaacag tgcagttata tctggatatt tgattatccc gattttcatc 300

ttgatgtacc aaaaccaaaa aaaagtttat tagattctta atttagattc tgtattcttt 360

tttatactag attctctatt tgcggtgata cctggaaaca gctcatgtgc gctatctcac 420

tccttgtttg ttttggatca ggcaattttt gttgctattc agcgcagttc taggacttat 480

cggggatgga gatgaaacgg ttgattttta tcagttgtcc gagaattcgt aaacgggggc 540

cacccggata tattgttagc ctcacatctt gtgcaaactt tagcgcaggc cgcgattaga 600

tatccccact taggtttatt cactcttccg cggtttacta gactctaacc cacgtttgtc 660

atttcaattt ttgaacgtga acgatgcagt gcatttcagt gtgtctgaaa tagtcagtga 720

atcgtgccaa gtcatataaa gtgcaatgta agtgtttcaa gtgtctaatt attatagtta 780

tccagaaaac tttcgtaacc cactattttt ttattcttag cttattttat ccccaaa 837

<210> 89
<211> 240
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 89
aattttgttc aacttttaa agttttccat tcattatgta taaatatatg ttcacattaa 60

gcgactgtac aagtattacg aataaaattg ttcattttct aaaatcaagt cgtcattttg 120

acccaatatt tcaacagtgc cacttactct gtgtttgacg actatacccg tcatcgcttg 180

attatcgcga cacacactgg tgcgcgcttt gcccacaggt cgccacggtt aactggttaa 240

<210> 90
<211> 288
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 90
ttaacccctt aacctacgat ttagattcga agatgttagg ccgaaattgt atacaagttc 60

gcgcagcgtt cgggacgttc gcacgacttg ggtacacgcc gatccgggca attgtaaaca 120

tgacggacat cgcccgtggt agagcggtcg cggtttgtag atagcacaga caagactcgt 180

gatgtatttc tatcatctct tcgtatcgta attagtttcc agtcgttctt gatcgcattc 240

gcacgtcgaa atttacgttc ataaattcta gagaagcaaa cccacaag 288

<210> 91
<211> 164
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 91
ttttgtattt tggagttttg tataaataaa tattttgtaa tacttgcgcc taccacaatt 60

attgcatcag actgtaaatg cgtatcaaat attccacgta atatttacat cgggcccgat 120

caccgtacgc gggctatgcc cgtcattgta ggttaagggg ttaa 164

<210> 92
<211> 280
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 92
ttaaccttta agtatggacg tggagtctca caggctactc aatgtttacg ttttcatagt 60

ttcacctatt tccccccgct ccccgcgatt gagcagctca gtagcttttg ttttagttgc 120

caaactacca acgagggagg aggttgtgtc gtccggtgaa tctcacgtga gttataacca 180

tcgaaaaatt gactggagcc tgttaggcta cacgtccatt gttgtcatat aatatatttt 240

ataagggcga ttatgtttgt ttcagatttt gtagtacaaa 280

<210> 93
<211> 400
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 93
atttgcgtta ttagactgtt gtcaaaattt tttgtattag ttacctgaag taggtttttt 60

gtgtttttgg ttccttatct attatatttt aagaaaaaaa gacaaatttt gttatagtaa 120

taagttgagc tgttttaaat atctaaaaat gtagcctaag taaattaaga cttaaaagtg 180

ccataattat tgatttttca catttctata tttttgttaa taaaagatga ttatataagc 240

atgttatttt attgctaaat accttaactg taatatccaa tcagttttta agcaacctta 300

tatcaaattc tcaaaaaaaa agtgttagca tataggagcc tgtgagactc cacgtccgca 360

gtagtgttaa gaaaaaatta cgtccatact taaaggttaa 400

<210> 94
<211> 258
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 94
ttaacccggc gtgattgacg ctgggtcaca gtgacccagc gcgttttaaa acggccatat 60

ttttttatg agttgatcat ttgttttaac cgtttaagta gctggagtta cgtccccccc 120

ctccttagtc ggccggtaag tttagtgcta cgtcggctgc gcagcgagat acacgtgcgc 180

caagtcaacg cgggtaagtt tgacccagcg tcatcgcggg cgtcgtattt ttgtggcatt 240

cctttttaa ttaatttt 258

<210> 95
<211> 362
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 95
tttcttacta tttttaatat aaaagtattt ttgatctctt atctataacc taagattgtt 60

agttcctatt attcgtaaga aaagtctatt aaaattgtta aaagtagaac aaactaatga 120

atgttaaatt ttgaaccttg attttgcatg tgttactttg gaaaccaata aaagtatgat 180

tgatttaata taatggcata attttatttt ataacaagcg cagacgaccc tttttaacaa 240

ataactaaaa aaaataagat aacgtctttt atttcgcaaa aaatttactt tataatgagg 300

ggtaattgtg acccagtgtc attgaccacg taatttttt cacgtcaatc acgccgggtt 360

aa 362

<210> 96
<211> 379
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 96
ttaaccctgg aatactatac cggggtactg gattccccgg gccatttagt ttttctgatt 60

ttcaggagat ggcagcactt atctgattgt gcttccaggt attctcctaa ctcttaagca 120

tctattcagt tgcaggtttg aacttgttct aagtggttgt gttttgtggt atcgctgtct 180

tggggcagtc aattccccag tgtagtgttc atgtaagtat aacaaattat agcttttcta 240

tcttctataa ttgagaactg attattgata tttattataa gttgtataat gctttttat 300

aattaattat taattaataa tgtaaagttg attaattaat cataataatt gcattatttc 360

ttaattacag ctctccaaa 379

<210> 97
<211> 182
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 97
aggttattgt agtggaacag aatcctgtta atgtagtagt aagtattgta tttacatatt 60

atcattaaag aaagtgtgag tttttacgat attattttta attattattt tccttgtggg 120

gcatctagtt ccccagtgta gtactagtgt cgccagcaac aactgtagta ttccagggtt 180

aa 182

<210> 98
<211> 378
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 98
ttaacccggc atccgacaca tggggtatat gaaaccccaa cgcatgaaaa acgttcagta 60

cggattaata cttcgggtct atcgggtgct gcgtcctagt agctttaagt gatacattaa 120

tccatacata tcgcttctca gtacacttga ccggttggcg taatatcgag taggcgtgtt 180

tcaaagtcgt ctggatttat cacaccccac ctgtcgaatc tttaaacttt taaacggttt 240

cattgtgttt tataataaat attttataat tttgctgctt agataaggta agtgatttta 300

cttttagtta tggtgatttg gattttgtct agttgcacac tgttttatct ctattttagt 360

aattaatata ataatata 378

<210> 99
<211> 354
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 99
tatgtggtaa catattgtaa aaattgtagt gacttgagtt ccacagcata tgaataaaat 60

ggtattatta tttaatatta ttattaatta atttacttta cttatgctgg ttgcgcgaaa 120

tttatctttc atttttcata caaacccaat gtaggacaat aaacattttt ttttactata 180

aattaaatta atcgttattt gacatcatat caacaacaag tcccaccaga aatctaagaa 240

ataagtccca gaaataacaa ataaattcaa ataaaccgtt gtttgagttg gggtatatag 300

caccccacct gtcacaaatt gtcacaaaaa ttcacatgtc ggatgccggg ttaa 354

<210> 100
<211> 470
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 100
ttaaccttta aaaggtaacg tgggggtgga aatacccca cttctaaaaa aagaggtata 60

ttttttgtca ggagttggca gcagtcgtgt agttccaggt accttcctgt gaccttgaag 120

acagtctgta ttcagtagag tctcagtgct gacacatcct gtttattcaa cataacctcc 180

aaaagtgctt ggggagtctc tgtaccccca cgttacccgt tgtgtcagca catttcaccg 240

catccattct tctatttctt ttataaaagt aagtatatta tagtttttc tgacttgaat 300

aactagaatt gtagttgtta taacctaacc tataaactca cattaaattt ggccttcgta 360

aacataaact aacctggatg tgtgttacat agcaatttca tcatgtacga cttgccttta 420

cagttattgt attattttgt cacattctaa actcgtttgt gctttgcaga 470

<210> 101
<211> 339
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 101
ctttgggttg tataaaatgt ccactcgttg tagtttttt ttgtattaac attaattaat 60

aaataatatt ataacacttt tagatattat tgtaagtttt tttttcctat aaaatactgt 120

acattttaga tatttgtgaa aaaaactcat acacaaaact aaaaaaaaaa gaaaaatgat 180

ttttttatga ttcttgaagt ttttcctaac aaaataaaca tctaaattaa atcaaaggtc 240

cataatgtct taagtaaata gaaaaaataa atgggggtaa tcagacaccc cacgttacca 300

tttatattct actttcccat gttacccatt aaaggttaa 339

<210> 102
<211> 358
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 102
ttaacctttc agtacacgcg cgcggaccgt cactccgcaa aattcaaacg gtttaatttg 60

cccgtggcgc catctgttgt tgagttgaca agtctctttt ccacgtcatc cgtagaccgc 120

gtgtgcattt cactgtttac tgtttgacag agagtacgaa gtaaatagtt gttgttaata 180

gtaaatagtt gttcttgttt tatattatta ttaagtagat tttagttagt gttagttagt 240

aatagtgttt tgtgtttagt aaagacttaa tagtagtgta agtaaatagg ttattgtgga 300

gtattgtttg gttaaaacag gtaaataaaa gtacgatttc attaaattgt tgtcttga 358

<210> 103
<211> 201
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 103
atatattttg ataatttttt taaatgtata aatttattca attaatttca tactcatata 60

aaaaccaaaa aaaaaaatta aattttataa tttttctagc gccatctttc gcctggtggc 120

aaaaatatat tttaatgcgg actctcagtc cggcgcgtgt aatcttgtgt gtattaaaaa 180

ccgcgtgtac tggaaggtta a 201

<210> 104
<211> 208
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 104
ttaacccctt aacctacgat tcacgttcga gtgtttcggg cccgaaacgt aaacaaattc 60

gcgcaacctt cgagccattc gcgcgacttg tgtagtacgc tgatcgagcc tattatctct 120

tcgtatcgtg atcagtttca agttattctt ggtcactttc gcacatcgaa atttactctc 180

ataaattcta gagaagcagt cccacaag 208

<210> 105
<211> 299
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 105
acttttgta gtacttgcat ctaccacaat tattgcatca agctgtaatt acatatcaaa 60

tattccaaaa atgtttataa ttttaagagg gcgccgccgc taatatttat atttgacccg 120

atcatcgtac tacgggctat gcccgtaata ttcacttctg gcccgatcat cgtacacggg 180

ctatgcccgt aatatttacg tttggcccga tcagcgtaca cgggctatgc ccgtaatatt 240

tatttttggc ccgatcaacg tacacgggct ctgctcgtag ttgtaggtta aggggttaa 299

<210> 106
<211> 416
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 106
ttaagagaca ttactaaacg aaaggcagtt tttctttaca cacacacaca cacacacaca 60

aaaaacaaca actttgatgc agacttttgc ctggttcagg aatcgcgttc gagtaatgaa 120

gattacaact tctggaaatc gcaatggggc gaggactcat ggatgtccca tggaaacagc 180

cattcagctg gaactctaac tcttatatta tgtttatggt caatttgacc ggatttcaat 240

ttttgtgttg atcaaagcgc ctggttatcc tttaaattta aaaatgtcct tttggtttac 300

tttattttga taacttctga agagtcattc agcaccaggt gtgtgtgaaa gaggaacttt 360

ctctccactg tcctgtacac tatttccatg ccctttcttt gagaaataga ccaaaa 416

<210> 107
<211> 272
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 107
aaatgtcaaa cattgaaaaa ccccaaaaaa caggcaagtt aaatagttaa agaaaaagtg 60

ttaataatta aaatcagaag ttgcttaata tagtattgaa attagtttgt ttattcttct 120

catgtctcct aaatgtttgc ataatctaag ataaagttat tattgggtta aattaatttc 180

ctgtctgttt tgtgttgatt tacacaatgc aggtcaaaat tacccgcaac ataacaaatg 240

tatttttttt ctcaacataa tacaaggatt aa 272

<210> 108
<211> 15225
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 108
atgggagtga aggtcctgtt cgcactgatt tgcatcgccg tggcggaagc cgaagtgcaa 60

cttgtggaat cgggggggagg tttggtgcaa cctggaggat cattgagact gtcatgtgca 120

gcctcgggat tcaatatcaa ggacacttac atccactggg tgcggcaggc tccgggaaag 180

ggcctggaat gggtggcccg gatctacccc accaacggct acactcgcta cgctgactcc 240

gtgaagggac gcttcactat tagcgcggat acctccaaga acaccgccta cttgcaaatg 300

aactccctcc gggccgagga caccgccgtc tactactgct cgcgatgggg gggagatggc 360

ttctacgcga tggactactg gggccagggg acgctcgtca ctgtgtcgag cgcatccact 420

aaggggccta gcgtctttcc gctggccccg tcctccaagt ccacttcggg tggaaccgcg 480

gcactggggt gcctcgtgaa ggactacttc cccgagccgg tcaccgtgtc ctggaactcg 540

ggagccctga cctccggagt gcatactttc cctgcggtgc tgcagtcctc cgggctctac 600

tcgctgtcaa gcgtggtcac cgtcccgagc tcatccctgg gtactcagac ctacatttgc 660

aacgtgaacc acaaaccttc caacaccaag gtcgacaaga aagtggagcc taagagctgc 720

gacaagaccc acacctgtcc cccgtgtccc gcccctgagc tgctgggcgg ccccagcgtg 780

ttcctcttcc cgcctaagcc gaaggacact ctgatgatct cgagaacccc tgaagtgacc 840

tgtgtggtgg tggatgtgtc ccacgaggat ccggaagtga agttcaattg gtacgtggac 900

ggagtggaag tccataacgc caagaccaag ccccgcgagg aacagtacaa ctcaacttac 960

cgggtggtgt cagtgctgac cgtgctgcac caagattggc tgaacgggaa ggagtacaag 1020

tgcaaagtct ccaacaaggc gctgccggcc cccattgaaa agaccatcag caaggctaag 1080

ggccagcccc gggaaccaca ggtctacacc ttgccccctt cccgggagga aatgaccaag 1140

aaccaagtgt cgctgacgtg cctggtcaag ggcttttatc catctgacat cgccgtggag 1200

tgggaaagca acggccagcc ggaaaacaac tacaagacta ccccgcctgt gctggactcc 1260

gacggctcgt tcttcctgta ttccaagctc accgtggata agtccagatg gcagcagggc 1320

aatgtgttca gctgcagcgt gatgcatgag gccctgcaca accactacac tcagaaatca 1380

ctgtcccttt cccccggaaa gtaatgaggt atcgggggag gctaactgaa acacggaagg 1440

agacaatacc ggaaggaacc cgcgctatga cggcaataaa aagacagaat aaaacgcacg 1500

ggtgttgggt cgtttgttca taaacgcggg gttcggtccc agggctggca ctctgtcgat 1560

accccaccga gtccccattg gggccaatac gcccgcgttt cttccttttc cccaccccac 1620

cccccaagtt cgggtgaagg cccagggctc gcagccaacg tcggggcggc aggccctgcc 1680

atagaaatcg ataatatatg gtagggttca tagccagagt aacctttttt tttaattttt 1740

attttatttt atttttgagt cgggcgcgcc aaaatgaagt gaagttccta tactttctag 1800

agcgagctca cggggacagc ccccccccaa agcccccagg gatgtaatta cgtccctccc 1860

ccgctagggg gcagcagcga gccgcccggg gctccgctcc ggtccggcgc tccccccgca 1920

tccccgagcc ggcagcgtgc ggggacagcc cgggcacggg gaaggtggca cgggatcgct 1980

ttcctctgaa cgcttctcgc tgctctttga gcctgcagac acctgggggg atacggggaa 2040

aaagctttag gctgaaagag agatttagaa tgacaggcga gctcacgggg acagcccccc 2100

cccaaagccc ccagggatgt aattacgtcc ctccccccgct agggggcagc agcgagccgc 2160

ccggggctcc gctccggtcc ggcgctcccc ccgcatcccc gagccggcag cgtgcgggga 2220

cagcccgggc acggggaagg tggcacggga tcgctttcct ctgaacgctt ctcgctgctc 2280

tttgagcctg cagacacctg gggggatacg gggaaaaagc ttgaaacttg atctgtcgcc 2340

gcaattcaag cttcgtgagg ctccggtgcc cgtcagtgac ctgctatact ctggagacga 2400

gcggggctga cgtcgggagg tggcctccgt gggaagggac acccggatct tgacacagcc 2460

ttggcagcgg agtaaggaag agtagggata gattctggcc gccctcttgg ccagcttctc 2520

gccgccccac cctccgctag ggccaagagt aattcataca aaaggaggga tcgccttcgc 2580

aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct gtagccgccc 2640

cacgacagcg cgaggagcat gcgctcaggg ctgagcgcgg ggagagcaga gcacacaagc 2700

tcatagaccc tggtcgtggg ggggaggacc ggggagctgg cgcggggcaa actgggaaag 2760

cggtgtcgtg tgctggctcc gccctcttcc cgagggtggg ggagaacggt atataagtgc 2820

ggcagtcgcc ttggacgttc tttttcgcaa cgggtttgcc gtcagaacgc aggtgagggg 2880

cgggtgtggc ttccgcgggc cgccgagctg gaggtcctgc tccgagcggg ccgggccccg 2940

ctgtcgtcgg cggggattag ctgcgagcat tcccgcttcg agttgcgggc ggcgcgggag 3000

gcagagtgcg aggcctagcg gcaaccccgt agcctcgcct cgtgtccggc ttgaggccta 3060

gcgtggtgtc cgcgccgccg ccgcgtgcta ctccggccgc actctggtct ttttttttt 3120

gttgttgttg ccctgctgcc ttcgattgcc gttcagcaat aggggctaac aaagggaggg 3180

tgcggggctt gctcgcccgg agcccggaga ggtcatggtt ggggaggaat ggagggacag 3240

gagtggcggc tggggcccgc ccgccttcgg agcacatgtc cgacgccacc tggatggggc 3300

gaggcctggg gtttttcccg aagcaaccag gctggggtta gcgtgccgag gccatgtggc 3360

cccagcaccc ggcacgatct ggcttggcgg cgccgcgttg ccctgcctcc ctaactaggg 3420

tgaggccatc ccgtccggca ccagttgcgt gcgtggaaag atggccgctc ccgggccctg 3480

ttgcaaggag ctcaaaatgg aggacgcggc agcccggtgg agcgggcggg tgagtcaccc 3540

acacaaagga agagggcctg gtccctcacc ggctgctgct tcctgtgacc ccgtggtcct 3600

atcggccgca atagtcacct cgggcttttg agcacggcta gtcgcggcgg ggggagggga 3660

tgtaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg ccagcctggc 3720

gctggaagtc atttttggaa tttgtcccct tgagttttga gcggagctaa ttctcgggct 3780

tcttagcggt tcaaaggtat cttttaaacc ctttttttagg tgttgtgaaa accaccgcta 3840

attcaaagca agccgccacc atggacatga gggtccccgc tcagctcctg gggctcctgc 3900

tgctctggct cccaggtgcc aaatgtgata ttcagatgac ccaatccccc tcctcattga 3960

gcgcgtccgt cggagacaga gtgaccatta cttgtcgcgc ctcccaagac gtgaacaccg 4020

ctgtggcttg gtaccagcag aagccgggaa aggcccctaa gctgctgatc tactctgcct 4080

ccttcctgta ctcgggcgtg ccgagccggt tcagcgggag ccggtcggga accgatttca 4140

ctctgaccat ctcgtcactg caacccgagg actttgccac ctactactgc cagcagcact 4200

acaccactcc accgaccttc ggacaaggca ccaaggtcga aatcaagcgc accgtggccg 4260

cccctagcgt gtttatcttc cctccctcgg atgagcagct taagtcaggc accgcatccg 4320

tggtctgcct gctcaacaac ttctacccga gggaagccaa agtgcagtgg aaagtggaca 4380

acgcgctcca gtcgggaaac tcccaggagt ccgtgaccga acaggactcc aaggacagca 4440

cttattccct gtcctccact ctgacgctgt caaaggccga ctacgagaag cacaaggtct 4500

acgcctgcga agtgacccat caggggcttt cctcgcccgt gactaagagc ttcaatcggg 4560

gcgaatgcta ataaaagctt aattaagatc cttttccctc tgaccagaat tatgggaaca 4620

tcatgaagcc ccttgagcat ctagcttctg gctaataaag gaaatttatt ttcattgcaa 4680

tagtgtgttg gaatttttg tgtctctcac tcggaaggac atatgggagg gcaaatcatt 4740

taaaacatca gaatgagtat ttggtttaga gtttggcaac atatgcccat atgctggctg 4800

ccatgaacaa aggttggcta taaagaggtc atcagtatat gaaacagccc cctgctgtcc 4860

attccttatt ccatagaaaa gccttgactt gaggttagat ttttttttata ttttgttttg 4920

tgttattttt ttctttaaca tccctaaaat tttccttaca tgttttacta gccagatttt 4980

tcctcctctc ctgactactc ccagtcatag ctgtccctct tctcttatgg agatcagaaa 5040

attttgtgtc gcccttcgct gaacaccagg tgggccgcct actgcgcacg cgcgggtttg 5100

cgggcagccg cctgggctgt gggagcagcc cgggcagagc tctcctgcct ctccaccagc 5160

ccaccccgcc gcctgaccgc cccctcccca ccccccaccc cccacccccg gaaaacgcgt 5220

cgtcccctgg gctgggtggt gacccccgtc ccgcgaaaca ccgggccccg cgcagcgtcc 5280

gggcctgaca ccgctccggc ggctcgcctc ctatgcgccc ccgcgccacc gtcgcccgcc 5340

cgcccgggcc cctgcagccg cccaggtgcc agcacggagc gcctggcggc ggaacgcaga 5400

ccccaggccc ggcgcacacc ggggacgctg agcgttccag gcgggaggga aggcgggcag 5460

agatggagag aggaacggga gtcctagagg ggcggaagga cgggcggagg gacgttagga 5520

gggagggagg gaggcaggga ggcagggagg aacggaggga aagacagagc gacgcaggga 5580

ctgggggcgg gcgggaggga gccggggaac gggggggagga aggcagggag gaaaagcggt 5640

cctcggcctc cgggagtagc gggacccccg ccctccggga aaacggtcag cgtccggcgc 5700

gggctgaggg ctgggcccac agccgccgcg ccggccggcg gggcaccacc cattcgcccc 5760

ggttccgtgg cccagggagt gggcggtttc ctccgggaca aaagaccggg actcgggttg 5820

ccgtcgggtg ttcacccgcg cggttcacag accgcacatc cccaggctga gccctgcaac 5880

gcggcgcgag gccgacagcc ccggccacgg aggagccaca cgcaggacga cggaggcgtg 5940

attttggttt ccgcgtggct ttgccctccg caaggcggcc tgttgctcaa gtctctccgg 6000

cccccgaaag gctggccatg ccgactgttt gctcccggag ctctgcgggc acccggaaac 6060

atgcagggaa gggtgcaagc ccggcacggt gccttcgctc tccttgccag gttccaaacc 6120

ggccacactg cagactcccc acgttgccgc acgcgggaat ccatcgtcag gccatcacgc 6180

cggggaggca tctcctctct ggggtgtcgc tctggacttc tacgtggaaa tgaacgagag 6240

ccacacgcct gcgtgtgcca gaccgtcccg gcaacggcga cgcccacagg cattgcctcc 6300

ttcacggaga gagggcctgg cacactcaag actcccacgg aggttcagtt ccacactcca 6360

cctaggagat actgaatatt gaaaatctca gaaaatgtga caagttaaat tacaaaaaaa 6420

aagtgtttgt gaaggaaaaa aatattaaat atagtgttgg aataaaaaaa tagtattgtt 6480

tgtctctttc ctaaatgttg aaatattcta aaataaagtt gatatcagtt taacctgttt 6540

ttttattgtt ttgagtggat ttacacagta tgggtcaaaa tgacccgcaa cataatcaag 6600

gtaatttttt ttcaacataa tacgagggtt aatccgccta aggtgctggt tcttttggtg 6660

cttgtatttt ttttcttccc ataatacaaa gataattatg aatgtgccta atgctaaaaa 6720

gactgttaaa aattaatatt ttatgtaagt ttgttgatta tttctaatat tttaatgaat 6780

actttgtgat ttttgatctc atgtgatttt gccaaaaatt ttgctaagtg ttttttaaaa 6840

acactcaaaa gttaattata aataaaaaaa ttaaacaaaa aacattttat tttatttaaa 6900

atctatccac aaaagcttat tattatacaa taaaacctaa aaaccccaaa tattttaaaa 6960

tatgaacatt tatatacacg ggccgcggag gcccccacgt cagtacttac gtgaaaataa 7020

ttccacctca gtagctaaag gttaagcgag aagattgcga gctgtatctt ttcgattatc 7080

caaagataat agtattttag ttgatttatt agtgccttaa attaatgaaa gtctgacttc 7140

gatctctgca ttatatgtaa gattgttaat tatagaacta agagtttaat ttctgttaat 7200

taaaattaag cgattttgaa taattgttaa ataaagatat tttcacatac atttacatat 7260

tttatttatt atctgtaata ataatacatt ctaaaagaca taaatataaa acaaaatttt 7320

cctagcttgt tcatttgtgt aaaacatgta ttttcaatat cgggtttgac agacccacca 7380

ggcatgccgt gtgattttta tgtaccaggc atgtcaaggg ttaagcggcc gctcagcctt 7440

gagcggtatc agctcactca aaggcggtaa tacggttatc cacagaatca ggggataacg 7500

caggaaagaa catgtgagca aaaggccagc aaaaggccag gaaccgtaaa aaggccgcgt 7560

tgctggcgtt tttccatagg ctccgccccc ctgacgagca tcacaaaaat cgacgctcaa 7620

gtcagaggtg gcgaaacccg acaggactat aaagatacca ggcgtttccc cctggaagct 7680

ccctcgtgcg ctctcctgtt ccgaccctgc cgcttaccgg atacctgtcc gcctttctcc 7740

cttcgggaag cgtggcgctt tctcatagct cacgctgtag gtatctcagt tcggtgtagg 7800

tcgttcgctc caagctgggc tgtgtgcacg aacccccgt tcagcccgac cgctgcgcct 7860

tatccggtaa ctatcgtctt gagtccaacc cggtaagaca cgacttatcg ccactggcag 7920

cagccactgg taacaggatt agcagagcga ggtatgtagg cggtgctaca gagttcttga 7980

agtggtgggc taactacggc tacactagaa gaacagtatt tggtatctgc gctctgctga 8040

agccagttac cttcggaaaa agagttggta gctcttgatc cggcaaacaa accaccgctg 8100

gtagcggtgg ttttttgtt tgcaagcagc agattacgcg cagaaaaaaa ggatctcaag 8160

aagatccttt gatcttttct acggggtctg acgctcagtg gaacgacgcg cgcgtaactc 8220

acgttaaggg attttggtca tgagttagaa aaactcatcg agcatcaaat gaaactgcaa 8280

tttattcata tcaggattat caataccata tttttgaaaa agccgtttct gtaatgaagg 8340

agaaaactca ccgaggcagt tccataggat ggcaagatcc tggtatcggt ctgcgattcc 8400

gactcgtcca acatcaatac aacctattaa tttcccctcg tcaaaaataa ggttatcaag 8460

tgagaaatca ccatgagtga cgactgaatc cggtgagaat ggcaaaagtt tatgcatttc 8520

tttccagact tgttcaacag gccagccatt acgctcgtca tcaaaatcac tcgcatcaac 8580

caaaccgtta ttcattcgtg attgcgcctg agcgaggcga aatacgcgat cgctgttaaa 8640

aggacaatta caaacaggaa tcgagtgcaa ccggcgcagg aacactgcca gcgcatcaac 8700

aatattttca cctgaatcag gatattcttc taatacctgg aacgctgttt ttccggggat 8760

cgcagtggtg agtaaccatg catcatcagg agtacggata aaatgcttga tggtcggaag 8820

tggcataaat tccgtcagcc agtttagtct gaccatctca tctgtaacat cattggcaac 8880

gctacctttg ccatgtttca gaaacaactc tggcgcatcg ggcttcccat acaagcgata 8940

gattgtcgca cctgattgcc cgacattatc gcgagcccat ttatacccat ataaatcagc 9000

atccatgttg gaatttaatc gcggcctcga cgtttcccgt tggatatggc tcatttttta 9060

cttcctcacc ttgtcgtatt atactatgcc gatatactat gccgatgatt aattgtcgac 9120

actgcggggg ctctggcgcg ccgtttaaac ttaaccctca tattatgtta agggtcaatt 9180

tgacccattt cagtttttgg tttgaccaaa gaactggtta tcctttcttt ttcttcacga 9240

aagttggtga cttttcctca tctagggtca tgaacttgtg tgtaaaatct ggatactgtg 9300

aagtgtcgtg gaatgtctgt gaacagtttg tatacaaaga tgatgttgcg ggtcattttg 9360

acccacacac tttgatgtga gcaagtagct gtccagatcc gaaataaaca tgtctctttg 9420

atgcacttta ttttgattgc taaattattt atattttgac tgtctctgaa tagaccttca 9480

gatcagagac tcaggtgtgt gtgggggagg agctttctct cccttgtcct tgtcactgtt 9540

ctcgtgtcat ctctttgaga aacagcaaaa ctgtctaact ggtccgatcc ttaaccttta 9600

actgctgagg tgggggcttt tcgagcctag cgaaagtgaa attgttcccc tcctcccttc 9660

ccccgcgcgc gacaaacccg taacttctag tagcttcgat gttagttgcg cctaggccgt 9720

cagaagcttc gcacgtgttt tcgtgcgcaa ttcggtaagt aaattcaatt tgaaatttgt 9780

cgcgggcttc ttaggcccca cctcagtgtt tacgtaactt ttttgtaaat agtttcgatt 9840

aagttattgt gttttttttt tgcagtagct tgaaaacgtt tgaaaaggct gagttgacgt 9900

atctgtttaa cccttggcat gcctggtagg gtttattaga cccaccactt tgaaaaacct 9960

atgatatttt tttaaattga aggctattgt tgacgtgtgt tatagtagct tcgcgcaata 10020

aaccggcggc cattttgacg agcgaacttc agtctcacgt gagcgtgcgt gcgagtagca 10080

cgtgtgtaaa gtgcgcgcgg gcccgtggga ccctaccagg catacaacgt aacattctgt 10140

cggtaagaat attttcttta ttttttggca tttctttgtt taatgtgtta aattataata 10200

cgaaaaaaat attgttgcag tagaagctag cgcgagctca cggggacagc ccccccccaa 10260

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 10320

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 10380

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 10440

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 10500

tgacagaatc atagaacggc ctgggttgca aaggagcaca gtgctcatcc agatccaacc 10560

ccctgctatg tgcagggtca tcaaccagca gcccaggctg cccagagcca catccagcct 10620

ggccttgaat gcctgcaggg atggggcatc cacagcctcc ttgggcaacc tgttcagtgc 10680

gtcaccaccc tctgggggaa aaactgcctc ctcatatcca acccaaacct cccctgtctc 10740

agtgtaaagc cattcccccc tgtcctatca agggggagtt tgctgtgaca ttgttggtct 10800

ggggtgacac atgtttgcca attcagtgca tcacggagag gcagatcttg gggataagga 10860

agtgcaggac agcatggacg tgggacatgc tggtgttgag ggctctggga cactctccaa 10920

gtcacagcgt tcagaacagc cttaaggata agaagatagg atagaaggac aaagagcaag 10980

ttaaaaccca gcatggagag gagcacaaaa aggccacaga cactgctggt ccctgtgtct 11040

gagcctgcat gtttgatggt gtctggatgc aagcagaagg ggtggaagtg cttgcctgga 11100

gagatacagc tgggtcagta ggactgggac aggcagctgg agaattgcca tgtagatgtt 11160

catacaatcg tcaaatcatg aaggctggaa aagccctcca agatccccaa gaccaacccc 11220

aacccaccca ccgtgcccac tggccatgtc cctcagtgcc acatccccac agttcttcat 11280

cacctccagg gacggtgacc cccccacctc cgtgggcagc tgtgccactg cagcaccgct 11340

ctttggagaa ggtaaatctt gctaaatcca gcccgaccct cccctggcac aacgtaaggc 11400

cattatctct catccaactc caggacggag tcagtgagaa tattggtacc ggggtgtggt 11460

gtcttccaga catgataaga tacattgatg agtttggaca aaccacaact agaatgcagt 11520

gaaaaaaatg ctttatttgt gaaatttgtg atgctattgc tttatttgta accattataa 11580

gctgcaataa acaagttaac aacaacaatt gcattcattt tatgtttcag gttcaggggg 11640

aggtgtggga ggttttttaa agcaagtaaa acctctacaa atgtggtatg gctgattatg 11700

atctctagtc aaggcactat acatcaaata ttccttatta acccctttac aaattaaaaa 11760

gctaaaggta cacaattttt gagcatagtt attaatagca gacactctat gcctgtgtgg 11820

agtaagaaaa aacagtatgt tatgattata actgttatgc ctacttataa aggttacaga 11880

atatttttcc ataattttct tgtatagcag tgcagctttt tcctttgtgg tgtaaatagc 11940

aaagcaagca agagttctat tactaaacac agcatgactc aaaaaactta gcaattctga 12000

aggaaagtcc ttgggatctt ctacctttct cttctttttt ggaggagtag aatgttgaga 12060

gtcagcagta gcctcatcat cactagatgg catttcttct gagcaaaaca ggttttcctc 12120

attaaaggca ttccaccact gctcccattc atcagttcca taggttggaa tctaaaatac 12180

acaaacaatt agaatcagta gtttaacaca ttatacactt aaaaatttta tatttacctt 12240

agagctttaa atctctgtag gtagtttgtc caattatgtc acaccacaga agtaaggttc 12300

cttcacaaag atctctctgg ggcggggtgg gatgaactag gaaaggctca agatcactca 12360

aagtctaatt attagttttt gtattggaag ggctcgtcgc cagtctcatt gagaaggcat 12420

gtgcggacga tggcttctgt cactgcaaag gggtcacaat tggcagaggg gcggcgatct 12480

tcaaagtaac ctttcttctc ctggccgaca gtccggggaa tgcggatgct ggcactgcga 12540

ttggcgacac cagcagaaaa gtcgttgatg ttggacgttt cgtggaaccc agtcagacga 12600

cgggcattgt ccaggccccc cttgggatcg taggctcgaa tgtggtactg gtgccgcttg 12660

cttagtttct cgatggcctc ctcgatgtgc ttcagaccat tctcctcccg catggccttg 12720

gtgctaaagt tggtatggca gcctgcacca ttccagttcc caggaatggg cttggggtca 12780

aaggttgcta ttaccccaaa gtcctcacat actcgatgca agatgaaacg ggccacccag 12840

agatgatctc ccatgtggat tccttcacag ggtcctattt ggaactccca ctgggcaggc 12900

atgacctcag catttgttcc tgtaatcttg accccagcat acaagcaggc gcggtagtga 12960

gcctccacga tatccctgcc ataggctttg tctgcgccca caccacagta atacggacct 13020

tggggcccag gaaagccatt ggaaggccaa ccaaaagggt gcccatctgt tcccatcaga 13080

gtatactcct gttccattcc aaaccagggg tgctggttgc tcaccatgtc cattatccgt 13140

ttacaggagt gccttaaatt tgtctctgca ggcttccggt tgtacttgaa aacttcacag 13200

aacaccagct tgttgggctc ccggcggaag gggtcccgaa acatggcaac agggctgaga 13260

tacatgtcac tgttggagcc ctcagactga aaggtactag agccatcaaa attccactca 13320

ggtaactctt ctacacactt gggctcacag tccagggtgc gggttttgca gcgcagtcct 13380

tctccagtac catcaaccca gatatacatg gcttggactt tctcaccctg gggcaggcac 13440

aggtacattt gcttgatgtt tttgttcaag tgggaacttg ctgaggtggc catgccaccc 13500

tgcagagtcg ctctgtgttc gaggccacac gcgtcacctt aatatgcgaa gtggacctgg 13560

gaccgcgccg ccccgactgc atctgcgtgt tttcgccaat gacaagacgc tgggcggggt 13620

ttgtgtcatc atagaactaa agacatgcaa atatatttct tccggggaca ccgccagcaa 13680

acgcgagcaa cgggccacgg ggatgaagca gctggaagac tactctggag acgcaacctt 13740

tggagctaag ccagcaatgg tagagggaag attctgcacg tcccttccag gcggcctccc 13800

cgtcaccacc ccccccaacc cgccccgacc ggagctgaga gtaattcata caaaaggact 13860

cgcccctgcc ttggggaatc ccagggaccg tcgttaaact cccactaacg tagaacccag 13920

agatcgctgc gttcccgccc cctcacccgc ccgctctcgt catcactgag gtggagaata 13980

gcatgcgtga ggctccggtg cccgtcagtg ggcagagcgc acatcgccca cagtccccga 14040

gaagttgggg ggaggggtcg gcaattgaac gggtgcctag agaaggtggc gcggggtaaa 14100

ctgggaaagt gatgtcgtgt actggctccg ccttttccc gagggtgggg gagaaccgta 14160

tataagtgca gtagtcgccg tgaacgttct ttttcgcaac gggtttgccg ccagaacaca 14220

ggtaagtgcc gtgtgtggtt cccgcgggcc tggcctcttt acgggttatg gcccttgcgt 14280

gccttgaatt acttccacct ggctccagta cgtgattctt gatcccgagc tggagccagg 14340

ggcgggcctt gcgctttagg agccccttcg cctcgtgctt gagttgaggc ctggcctggg 14400

cgctggggcc gccgcgtgcg aatctggtgg caccttcgcg cctgtctcgc tgctttcgat 14460

aagtctctag ccatttaaaa tttttgatga cgtgctgcga cgcttttttt ctggcaagat 14520

agtcttgtaa atgcgggcca ggatctgcac actggtattt cggtttttgg gcccgcggcc 14580

ggcgacgggg cccgtgcgtc ccagcgcaca tgttcggcga ggcggggcct gcgagcgcgg 14640

ccaccgagaa tcggacgggg gtagtctcaa gctggccggc ctgctctggt gcctggcctc 14700

gcgccgccgt gtatcgcccc gccctgggcg gcaaggctgg cccggtcggc accagttgcg 14760

tgagcggaaa gatggccgct tcccggccct gctccagggg gctcaaaatg gaggacgcgg 14820

cgctcgggag agcgggcggg tgagtcaccc acacaaagga aaagggcctt tccgtcctca 14880

gccgtcgctt catgtgactc cacggagtac cgggcgccgt ccaggcacct cgattagttc 14940

tggagctttt ggagtacgtc gtctttaggt tgggggggagg ggttttatgc gatggagttt 15000

ccccacactg agtgggtgga gactgaagtt aggccagctt ggcacttgat gtaattctcc 15060

ttggaatttg gccttttga gtttggatct tggttcattc tcaagcctca gacagtggtt 15120

caaagttttt ttcttccatt tcaggtgtcg tgaacacgtc tcaggggcag cttgcttgtt 15180

cttttgcag aagctcagaa taaacgctca actttggccg ccacc 15225

<210> 109
<211> 57
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 109
agcttgcttg ttctttttgc agaagctcag aataaacgct caactttggc cgccacc 57

<210> 110
<211> 166
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 110
gatctttttc cctctgccaa aaattatggg gacatcatga agcccttga gcatctgact 60

tctggctaat aaaggaaatt tattttcatt gcaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 166

<210> 111
<211> 124
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 111

Met Ala Lys Leu Thr Ser Ala Val Pro Val Leu Thr Ala Arg Asp Val
1 5 10 15

Ala Gly Ala Val Glu Phe Trp Thr Asp Arg Leu Gly Phe Ser Arg Asp
20 25 30

```
Phe Val Glu Asp Asp Phe Ala Gly Val Val Arg Asp Asp Val Thr Leu
        35                  40                  45

Phe Ile Ser Ala Val Gln Asp Gln Val Val Pro Asp Asn Thr Leu Ala
    50                  55                  60

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

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

Ile Gly Glu Gln Pro Trp Gly Arg Glu Phe Ala Leu Arg Asp Pro Ala
            100                 105                 110

Gly Asn Cys Val His Phe Val Ala Glu Glu Gln Asp
        115                 120
```

<210> 112
<211> 152
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 112

```
Met Val Ala Ile Ser Lys Asn Gly Val Ile Gly Asn Gly Pro Asp Ile
1               5                   10                  15

Pro Trp Ser Ala Lys Gly Glu Gln Leu Leu Phe Lys Ala Ile Thr Tyr
            20                  25                  30

Asn Gln Trp Leu Leu Val Gly Arg Lys Thr Phe Glu Ser Met Gly Ala
        35                  40                  45

Leu Pro Asn Arg Lys Tyr Ala Val Val Thr Arg Ser Ser Phe Thr Ser
    50                  55                  60
```

```
Asp Asn Glu Asp Val Leu Ile Phe Pro Ser Ile Lys Asp Ala Leu Thr
65                  70                  75                  80


Asn Leu Lys Lys Ile Thr Asp His Val Ile Val Ser Gly Gly Gly Glu
                85                  90                  95


Ile Tyr Lys Ser Leu Ile Asp Gln Val Asp Thr Leu His Ile Ser Thr
            100                 105                 110


Ile Asp Ile Glu Pro Glu Gly Asp Val Tyr Phe Pro Glu Ile Pro Ser
        115                 120                 125


Asn Phe Arg Pro Val Phe Thr Gln Asp Phe Ala Ser Asn Ile Asn Tyr
    130                 135                 140


Ser Tyr Gln Ile Trp Gln Lys Gly
145                 150


<210>  113
<211>  187
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  113

Met Val Arg Pro Leu Asn Cys Ile Val Ala Val Ser Gln Asn Met Gly
1               5                   10                  15


Ile Gly Lys Asn Gly Asp Leu Pro Trp Pro Pro Leu Arg Asn Glu Phe
            20                  25                  30


Lys Tyr Phe Gln Arg Met Thr Thr Thr Ser Ser Val Glu Gly Lys Gln
        35                  40                  45


Asn Leu Val Ile Met Gly Arg Lys Thr Trp Phe Ser Ile Pro Glu Lys
    50                  55                  60
```

```
Asn Arg Pro Leu Lys Asp Arg Ile Asn Ile Val Leu Ser Arg Glu Leu
65                  70                  75                  80


Lys Glu Pro Pro Arg Gly Ala His Phe Leu Ala Lys Ser Leu Asp Asp
                85                  90                  95


Ala Leu Arg Leu Ile Glu Gln Pro Glu Leu Ala Ser Lys Val Asp Met
            100                 105                 110


Val Trp Ile Val Gly Gly Ser Ser Val Tyr Gln Glu Ala Met Asn Gln
        115                 120                 125


Pro Gly His Leu Arg Leu Phe Val Thr Arg Ile Met Gln Glu Phe Glu
    130                 135                 140


Ser Asp Thr Phe Phe Pro Glu Ile Asp Leu Gly Lys Tyr Lys Leu Leu
145                 150                 155                 160


Pro Glu Tyr Pro Gly Val Leu Ser Glu Val Gln Glu Glu Lys Gly Ile
                165                 170                 175


Lys Tyr Lys Phe Glu Val Tyr Glu Lys Lys Asp
            180                 185


<210>  114
<211>  264
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  114

Met Ile Glu Gln Asp Gly Leu His Ala Gly Ser Pro Ala Ala Trp Val
1               5                   10                  15


Glu Arg Leu Phe Gly Tyr Asp Trp Ala Gln Gln Thr Ile Gly Cys Ser
            20                  25                  30
```

```
Asp Ala Ala Val Phe Arg Leu Ser Ala Gln Gly Arg Pro Val Leu Phe
        35                  40                  45

Val Lys Thr Asp Leu Ser Gly Ala Leu Asn Glu Leu Gln Asp Glu Ala
    50                  55                  60

Ala Arg Leu Ser Trp Leu Ala Thr Thr Gly Val Pro Cys Ala Ala Val
65                  70                  75                  80

Leu Asp Val Val Thr Glu Ala Gly Arg Asp Trp Leu Leu Leu Gly Glu
                85                  90                  95

Val Pro Gly Gln Asp Leu Leu Ser Ser His Leu Ala Pro Ala Glu Lys
            100                 105                 110

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

Ala Thr Cys Pro Phe Asp His Gln Ala Lys His Arg Ile Glu Arg Ala
    130                 135                 140

Arg Thr Arg Met Glu Ala Gly Leu Val Asp Gln Asp Asp Leu Asp Glu
145                 150                 155                 160

Glu His Gln Gly Leu Ala Pro Ala Glu Leu Phe Ala Arg Leu Lys Ala
                165                 170                 175

Ser Met Pro Asp Gly Glu Asp Leu Val Val Thr His Gly Asp Ala Cys
            180                 185                 190

Leu Pro Asn Ile Met Val Glu Asn Gly Arg Phe Ser Gly Phe Ile Asp
        195                 200                 205

Cys Gly Arg Leu Gly Val Ala Asp Arg Tyr Gln Asp Ile Ala Leu Ala
    210                 215                 220

Thr Arg Asp Ile Ala Glu Glu Leu Gly Gly Glu Trp Ala Asp Arg Phe
225                 230                 235                 240
```

```
Leu Val Leu Tyr Gly Ile Ala Ala Pro Asp Ser Gln Arg Ile Ala Phe
                245                 250                 255


Tyr Arg Leu Leu Asp Glu Phe Phe
            260


<210>  115
<211>  267
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  115

Met Gly Ser Ala Ile Glu Gln Asp Gly Leu His Ala Gly Ser Pro Ala
1               5                   10                  15


Ala Trp Val Glu Arg Leu Phe Gly Tyr Asp Trp Ala Gln Gln Thr Ile
            20                  25                  30


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


Val Leu Phe Val Lys Thr Asp Leu Ser Gly Ala Leu Asn Glu Leu Gln
    50                  55                  60


Asp Glu Ala Ala Arg Leu Ser Trp Leu Ala Thr Thr Gly Val Pro Cys
65                  70                  75                  80


Ala Ala Val Leu Asp Val Val Thr Glu Ala Gly Arg Asp Trp Leu Leu
                85                  90                  95


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


Ala Glu Lys Val Ser Ile Met Ala Asp Ala Met Arg Arg Leu His Thr
        115                 120                 125
```

```
Leu Asp Pro Ala Thr Cys Pro Phe Asp His Gln Ala Lys His Arg Ile
    130                 135                 140

Glu Arg Ala Arg Thr Arg Met Glu Ala Gly Leu Val Asp Gln Asp Asp
145                 150                 155                 160

Leu Asp Glu Glu His Gln Gly Leu Ala Pro Ala Glu Leu Phe Ala Arg
                165                 170                 175

Leu Lys Ala Arg Met Pro Asp Gly Asp Asp Leu Val Val Thr His Gly
            180                 185                 190

Asp Ala Cys Leu Pro Asn Ile Met Val Glu Asn Gly Arg Phe Ser Gly
        195                 200                 205

Phe Ile Asp Cys Gly Arg Leu Gly Val Ala Asp Arg Tyr Gln Asp Ile
    210                 215                 220

Ala Leu Ala Thr Arg Asp Ile Ala Glu Glu Leu Gly Gly Glu Trp Ala
225                 230                 235                 240

Asp Arg Phe Leu Val Leu Tyr Gly Ile Ala Ala Pro Asp Ser Gln Arg
                245                 250                 255

Ile Ala Phe Tyr Arg Leu Leu Asp Glu Phe Phe
            260                 265
```

<210> 116
<211> 264
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 116

```
Met Ile Glu Gln Asp Gly Leu His Ala Gly Ser Pro Ala Ala Trp Val
1               5                   10                  15
```

```
Glu Arg Leu Phe Gly Tyr Asp Trp Ala Gln Gln Thr Ile Gly Cys Ser
            20                  25                  30

Asp Ala Ala Val Phe Arg Leu Ser Ala Gln Gly Arg Pro Val Leu Phe
        35                  40                  45

Val Lys Thr Asp Leu Ser Gly Ala Leu Asn Glu Leu Gln Asp Glu Ala
    50                  55                  60

Ala Arg Leu Ser Trp Leu Ala Thr Thr Gly Val Pro Cys Ala Ala Val
65                  70                  75                  80

Leu Asp Val Val Thr Glu Ala Gly Arg Asp Trp Leu Leu Leu Gly Glu
                85                  90                  95

Val Pro Gly Gln Asp Leu Leu Ser Ser His Leu Ala Pro Ala Glu Lys
            100                 105                 110

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

Ala Thr Cys Pro Phe Asp His Gln Ala Lys His Arg Ile Glu Arg Ala
    130                 135                 140

Arg Thr Arg Met Glu Ala Gly Leu Val Asp Gln Asp Asp Leu Asp Glu
145                 150                 155                 160

Glu His Gln Gly Leu Ala Pro Ala Glu Leu Phe Ala Arg Leu Lys Ala
                165                 170                 175

Arg Met Pro Asp Gly Glu Asp Leu Val Val Thr His Gly Asp Ala Cys
            180                 185                 190

Leu Pro Asn Ile Met Val Glu Asn Gly Arg Phe Ser Gly Phe Ile Asp
        195                 200                 205
```

```
Cys Gly Arg Leu Gly Val Ala Asp Arg Tyr Gln Asp Ile Ala Leu Ala
    210                 215                 220

Thr Arg Asp Ile Ala Glu Glu Leu Gly Gly Glu Trp Ala Asp Arg Phe
225                 230                 235                 240

Leu Val Leu Tyr Gly Ile Ala Ala Pro Asp Ser Gln Arg Ile Ala Phe
                245                 250                 255

Tyr Arg Leu Leu Asp Glu Phe Phe
            260
```

<210> 117
<211> 264
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 117

```
Met Val Glu Gln Asp Gly Leu His Ala Gly Ser Pro Ala Ala Trp Val
1               5                   10                  15

Glu Arg Leu Phe Gly Tyr Asp Trp Ala Gln Gln Thr Ile Gly Cys Ser
            20                  25                  30

Asp Ala Ala Val Phe Arg Leu Ser Ala Gln Gly Arg Pro Val Leu Phe
        35                  40                  45

Val Lys Thr Asp Leu Ser Gly Ala Leu Asn Glu Leu Gln Asp Glu Ala
    50                  55                  60

Ala Arg Leu Ser Trp Leu Ala Thr Thr Gly Val Pro Cys Ala Ala Val
65                  70                  75                  80

Leu Asp Val Val Thr Glu Ala Gly Arg Asp Trp Leu Leu Leu Gly Glu
                85                  90                  95
```

```
Val Pro Gly Gln Asp Leu Leu Ser Ser His Leu Ala Pro Ala Glu Lys
            100                 105                 110

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

Ala Thr Cys Pro Phe Asp His Gln Ala Lys His Arg Ile Glu Arg Ala
    130                 135                 140

Arg Thr Arg Met Glu Ala Gly Leu Val Asp Gln Asp Asp Leu Asp Glu
145                 150                 155                 160

Glu His Gln Gly Leu Ala Pro Ala Glu Leu Phe Ala Arg Leu Lys Ala
                165                 170                 175

Arg Met Pro Asp Gly Glu Asp Leu Val Val Thr His Gly Asp Ala Cys
            180                 185                 190

Leu Pro Asn Ile Met Val Glu Asn Gly Arg Phe Ser Gly Phe Ile Asp
        195                 200                 205

Cys Gly Arg Leu Gly Val Ala Asp Arg Tyr Gln Asp Ile Ala Leu Ala
    210                 215                 220

Thr Arg Asp Ile Ala Glu Glu Leu Gly Gly Glu Trp Ala Asp Arg Phe
225                 230                 235                 240

Leu Val Leu Tyr Gly Ile Ala Ala Pro Asp Ser Gln Arg Ile Ala Phe
                245                 250                 255

Tyr Arg Leu Leu Asp Glu Phe Phe
            260
```

<210> 118
<211> 341
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 118

```
Met Asp Arg Ser Gly Lys Pro Glu Leu Thr Ala Thr Ser Val Glu Lys
1               5                  10                  15


Phe Leu Ile Glu Lys Phe Asp Ser Val Ser Asp Leu Met Gln Leu Ser
            20                  25                  30


Glu Gly Glu Glu Ser Arg Ala Phe Ser Phe Asp Val Gly Gly Arg Gly
        35                  40                  45


Tyr Val Leu Arg Val Asn Ser Cys Ala Asp Gly Phe Tyr Lys Asp Arg
    50                  55                  60


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


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


Arg Ala Gln Gly Val Thr Leu Gln Asp Leu Pro Glu Thr Glu Leu Pro
            100                 105                 110


Ala Val Leu Gln Pro Val Ala Glu Ala Met Asp Ala Ile Ala Ala Ala
        115                 120                 125


Asp Leu Ser Gln Thr Ser Gly Phe Gly Pro Phe Gly Pro Gln Gly Ile
    130                 135                 140


Gly Gln Tyr Thr Thr Trp Arg Asp Phe Ile Cys Ala Ile Ala Asp Pro
145                 150                 155                 160


His Val Tyr His Trp Gln Thr Val Met Asp Asp Thr Val Ser Ala Ser
                165                 170                 175


Val Ala Gln Ala Leu Asp Glu Leu Met Leu Trp Ala Glu Asp Cys Pro
            180                 185                 190
```

```
Glu Val Arg His Leu Val His Ala Asp Phe Gly Ser Asn Asn Val Leu
        195                 200                 205

Thr Asp Asn Gly Arg Ile Thr Ala Val Ile Asp Trp Ser Glu Ala Met
    210                 215                 220

Phe Gly Asp Ser Gln Tyr Glu Val Ala Asn Ile Phe Phe Trp Arg Pro
225                 230                 235                 240

Trp Leu Ala Cys Met Glu Gln Gln Thr Arg Tyr Phe Glu Arg Arg His
                245                 250                 255

Pro Glu Leu Ala Gly Ser Pro Arg Leu Arg Ala Tyr Met Leu Arg Ile
            260                 265                 270

Gly Leu Asp Gln Leu Tyr Gln Ser Leu Val Asp Gly Asn Phe Asp Asp
        275                 280                 285

Ala Ala Trp Ala Gln Gly Arg Cys Asp Ala Ile Val Arg Ser Gly Ala
    290                 295                 300

Gly Thr Val Gly Arg Thr Gln Ile Ala Arg Arg Ser Ala Ala Val Trp
305                 310                 315                 320

Thr Asp Gly Cys Val Glu Val Leu Ala Asp Ser Gly Asn Arg Arg Pro
                325                 330                 335

Ser Thr Arg Pro Arg
            340
```

<210> 119
<211> 341
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 119

```
Met Lys Lys Pro Glu Leu Thr Ala Thr Ser Val Glu Lys Phe Leu Ile
1               5                   10                  15


Glu Lys Phe Asp Ser Val Ser Asp Leu Met Gln Leu Ser Glu Gly Glu
            20                  25                  30


Glu Ser Arg Ala Phe Ser Phe Asp Val Gly Gly Arg Gly Tyr Val Leu
        35                  40                  45


Arg Val Asn Ser Cys Ala Asp Gly Phe Tyr Lys Asp Arg Tyr Val Tyr
    50                  55                  60


Arg His Phe Ala Ser Ala Ala Leu Pro Ile Pro Glu Val Leu Asp Ile
65                  70                  75                  80


Gly Glu Phe Ser Glu Ser Leu Thr Tyr Cys Ile Ser Arg Arg Ala Gln
                85                  90                  95


Gly Val Thr Leu Gln Asp Leu Pro Glu Thr Glu Leu Pro Ala Val Leu
            100                 105                 110


Gln Pro Val Ala Glu Ala Met Asp Ala Ile Ala Ala Ala Asp Leu Ser
        115                 120                 125


Gln Thr Ser Gly Phe Gly Pro Phe Gly Pro Gln Gly Ile Gly Gln Tyr
    130                 135                 140


Thr Thr Trp Arg Asp Phe Ile Cys Ala Ile Ala Asp Pro His Val Tyr
145                 150                 155                 160


His Trp Gln Thr Val Met Asp Asp Thr Val Ser Ala Ser Val Ala Gln
                165                 170                 175


Ala Leu Asp Glu Leu Met Leu Trp Ala Glu Asp Cys Pro Glu Val Arg
            180                 185                 190
```

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

Gly Arg Ile Thr Ala Val Ile Asp Trp Ser Glu Ala Met Phe Gly Asp
    210                 215                 220

Ser Gln Tyr Glu Val Ala Asn Ile Phe Phe Trp Arg Pro Trp Leu Ala
225                 230                 235                 240

Cys Met Glu Gln Gln Thr Arg Tyr Phe Glu Arg Arg His Pro Glu Leu
                245                 250                 255

Ala Gly Ser Pro Arg Leu Arg Ala Tyr Met Leu Arg Ile Gly Leu Asp
            260                 265                 270

Gln Leu Tyr Gln Ser Leu Val Asp Gly Asn Phe Asp Asp Ala Ala Trp
        275                 280                 285

Ala Gln Gly Arg Cys Asp Ala Ile Val Arg Ser Gly Ala Gly Thr Val
    290                 295                 300

Gly Arg Thr Gln Ile Ala Arg Arg Ser Ala Ala Val Trp Thr Asp Gly
305                 310                 315                 320

Cys Val Glu Val Leu Ala Asp Ser Gly Asn Arg Arg Pro Ser Thr Arg
                325                 330                 335

Pro Arg Ala Lys Glu
            340
```

<210> 120
<211> 199
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 120

```
Met Thr Glu Tyr Lys Pro Thr Val Arg Leu Ala Thr Arg Asp Asp Val
1               5                  10                  15

Pro Arg Ala Val Arg Thr Leu Ala Ala Ala Phe Ala Asp Tyr Pro Ala
            20                  25                  30

Thr Arg His Thr Val Asp Pro Asp Arg His Ile Glu Arg Val Thr Arg
        35                  40                  45

Ala Ala Arg Thr Leu Pro His Ala Arg Arg Ala Arg His Arg Gln Gly
    50                  55                  60

Val Gly Arg Ala Thr Arg Arg Arg Gly Gly Gly Leu Asp His Ala Gly
65                  70                  75                  80

Glu Arg Arg Ser Gly Gly Gly Val Arg Arg Asp Arg Asn Ala His Gly
                85                  90                  95

Arg Val Glu Arg Phe Pro Ala Gly Arg Ala Ala Thr Asp Gly Arg Pro
            100                 105                 110

Pro Gly Ala Ala Pro Ala Gln Gly Ala Arg Val Val Pro Gly His Arg
        115                 120                 125

Arg Arg Leu Ala Arg Pro Pro Gly Gln Gly Ser Gly Gln Arg Arg Arg
    130                 135                 140

Ala Pro Arg Ser Gly Gly Gly Arg Ala Arg Arg Gly Ala Arg Leu Pro
145                 150                 155                 160

Gly Asp Leu Arg Ala Pro Gln Pro Pro Phe Tyr Glu Arg Leu Gly Phe
                165                 170                 175

Thr Val Thr Ala Asp Val Glu Cys Pro Lys Asp Arg Ala Thr Trp Cys
            180                 185                 190

Met Thr Arg Lys Pro Gly Ala
        195
```

<210> 121
<211> 199
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 121

```
Met Thr Glu Tyr Lys Pro Thr Val Arg Leu Ala Thr Arg Asp Asp Val
1               5                   10                  15


Pro Arg Ala Val Arg Thr Leu Ala Ala Ala Phe Ala Asp Tyr Pro Ala
            20                  25                  30


Thr Arg His Thr Val Asp Pro Asp Arg His Ile Glu Arg Val Thr Glu
        35                  40                  45


Leu Gln Glu Leu Phe Leu Thr Arg Val Gly Leu Asp Ile Gly Lys Val
    50                  55                  60


Trp Val Ala Asp Asp Gly Ala Ala Val Ala Val Trp Thr Thr Pro Glu
65                  70                  75                  80


Ser Val Glu Ala Gly Ala Val Phe Ala Glu Ile Gly Pro Arg Met Ala
                85                  90                  95


Glu Leu Ser Gly Ser Arg Leu Ala Ala Gln Gln Gln Met Glu Gly Leu
            100                 105                 110


Leu Ala Pro His Arg Pro Lys Glu Pro Ala Trp Phe Leu Ala Thr Val
        115                 120                 125


Gly Val Ser Pro Asp His Gln Gly Lys Gly Leu Gly Ser Ala Val Val
    130                 135                 140


Leu Pro Gly Val Glu Ala Ala Glu Arg Ala Gly Val Pro Ala Phe Leu
145                 150                 155                 160
```

```
Glu Thr Ser Ala Pro Arg Asn Leu Pro Phe Tyr Glu Arg Leu Gly Phe
                165                 170                 175


Thr Val Thr Ala Asp Val Glu Cys Pro Lys Asp Arg Ala Thr Trp Cys
            180                 185                 190


Met Thr Arg Lys Pro Gly Ala
        195


<210>  122
<211>  199
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  122

Met Thr Glu Tyr Lys Pro Thr Val Arg Leu Ala Thr Arg Asp Asp Val
1               5                   10                  15


Pro Arg Ala Val Arg Thr Leu Ala Ala Ala Phe Ala Asp Tyr Pro Ala
            20                  25                  30


Thr Arg His Thr Val Asp Pro Asp Arg His Ile Glu Arg Val Thr Glu
        35                  40                  45


Leu Gln Glu Leu Phe Leu Thr Arg Val Gly Leu Asp Ile Gly Lys Val
    50                  55                  60


Trp Val Ala Asp Asp Gly Ala Ala Val Ala Val Trp Thr Thr Pro Glu
65                  70                  75                  80


Ser Val Glu Ala Gly Ala Val Phe Ala Glu Ile Gly Pro Arg Met Ala
                85                  90                  95


Glu Leu Ser Gly Ser Arg Leu Ala Ala Gln Gln Gln Met Glu Gly Leu
            100                 105                 110
```

Leu Ala Pro His Arg Pro Lys Glu Pro Ala Trp Phe Leu Ala Thr Val
        115   120   125

Gly Val Ser Pro Asp His Gln Gly Lys Gly Leu Gly Ser Ala Val Val
    130   135   140

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

Glu Thr Ser Ala Pro Arg Asn Leu Pro Phe Tyr Glu Arg Leu Gly Phe
                165   170   175

Thr Val Thr Ala Asp Val Glu Val Pro Glu Gly Pro Arg Thr Trp Cys
            180   185   190

Met Thr Arg Lys Pro Gly Ala
        195

<210> 123
<211> 600
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 123
atgaccgagt acaagcccac ggtgcgcctc gccacccgcg acgacgtccc cagggccgta 60

cgcaccctcg ccgccgcgtt cgccgactac cccgccacgc gccacaccgt cgatccggac 120

cgccacatcg agcgggtcac cgagctgcaa gaactcttcc tcacgcgcgt cgggctcgat 180

ataggtaagg tatgggtggc ggacgacggc gccgcggtgg cggtctggac cacgccggag 240

agcgtcgaag cgggggcggt gttcgccgag atcggcccgc gcatggccga gttgagcggt 300

tcccggctgg ccgcgcagca acagatggaa ggcctcctgg cgccgcaccg gcccaaggag 360

cccgcgtggt tcctggccac cgtcggcgtg tcgcccgacc accagggcaa gggtctgggc 420

agcgccgtcg tgctccccgg agtggaggcg gccgagcgcg ccggggtgcc cgccttcctg 480

gagacatccg cgccccgcaa cctccccttc tacgagcggc tcggcttcac cgtcaccgcc 540

gacgtcgagg tgcccgaagg accgcgcacc tggtgcatga cccgcaagcc cggtgcctga 600

<210> 124
<211> 132
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 124

Met Ala Lys Pro Leu Ser Gln Glu Glu Ser Thr Leu Ile Glu Arg Ala
1 5 10 15

Thr Ala Thr Ile Asn Ser Ile Pro Ile Ser Glu Asp Tyr Ser Val Ala
20 25 30

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

Tyr His Phe Thr Gly Gly Pro Cys Ala Glu Leu Val Val Leu Gly Thr
50 55 60

Ala Ala Ala Ala Ala Ala Gly Asn Leu Thr Cys Ile Val Ala Ile Gly
65 70 75 80

Asn Glu Asn Arg Gly Ile Leu Ser Pro Cys Gly Arg Cys Arg Gln Val
85 90 95

Leu Leu Asp Leu His Pro Gly Ile Lys Ala Ile Val Lys Asp Ser Asp
100 105 110

Gly Gln Pro Thr Ala Val Gly Ile Arg Glu Leu Leu Pro Ser Gly Tyr
115 120 125

Val Trp Glu Gly
130

<210> 125
<211> 399
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 125
atggccaagc ctttgtctca agaagaatcc accctcattg aaagagcaac ggctacaatc 60

aacagcatcc ccatctctga agattacagc gtcgccagcg cagctctctc tagcgacggc 120

cgcatcttca ctggtgtcaa tgtatatcat tttactgggg gaccttgtgc agaactcgtg 180

gtgctgggca ctgctgctgc tgcggcagct ggcaacctga cttgtatcgt cgcgatcgga 240

aatgagaaca ggggcatctt gagcccctgc ggacggtgcc gacaggtgct tctcgatctg 300

catcctggga tcaaagccat agtgaaggac agtgatggac agccgacggc agttgggatt 360

cgtgaattgc tgccctctgg ttatgtgtgg gagggctaa 399

<210> 126
<211> 373
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 126

Met Ala Thr Ser Ala Ser Ser His Leu Asn Lys Asn Ile Lys Gln Met
1 5 10 15

Tyr Leu Cys Leu Pro Gln Gly Glu Lys Val Gln Ala Met Tyr Ile Trp
20 25 30

Val Asp Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp
35 40 45

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

```
Ser Ser Thr Phe Gln Ser Glu Gly Ser Asn Ser Asp Met Tyr Leu Ser
65                  70                  75                  80

Pro Val Ala Met Phe Arg Asp Pro Phe Arg Arg Asp Pro Asn Lys Leu
                85                  90                  95

Val Phe Cys Glu Val Phe Lys Tyr Asn Arg Lys Pro Ala Glu Thr Asn
            100                 105                 110

Leu Arg His Ser Cys Lys Arg Ile Met Asp Met Val Ser Asn Gln His
        115                 120                 125

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

His Pro Phe Gly Trp Pro Ser Asn Gly Phe Pro Gly Pro Gln Gly Pro
145                 150                 155                 160

Tyr Tyr Cys Gly Val Gly Ala Asp Lys Ala Tyr Gly Arg Asp Ile Val
                165                 170                 175

Glu Ala His Tyr Arg Ala Cys Leu Tyr Ala Gly Val Lys Ile Thr Gly
            180                 185                 190

Thr Asn Ala Glu Val Met Pro Ala Gln Trp Glu Phe Gln Ile Gly Pro
        195                 200                 205

Cys Glu Gly Ile Arg Met Gly Asp His Leu Trp Val Ala Arg Phe Ile
    210                 215                 220

Leu His Arg Val Cys Glu Asp Phe Gly Val Ile Ala Thr Phe Asp Pro
225                 230                 235                 240

Lys Pro Ile Pro Gly Asn Trp Asn Gly Ala Gly Cys His Thr Asn Phe
                245                 250                 255
```

```
Ser Thr Lys Ala Met Arg Glu Glu Asn Gly Leu Lys His Ile Glu Glu
            260                 265                 270


Ala Ile Glu Lys Leu Ser Lys Arg His Arg Tyr His Ile Arg Ala Tyr
        275                 280                 285


Asp Pro Lys Gly Gly Leu Asp Asn Ala Arg Arg Leu Thr Gly Phe His
    290                 295                 300


Glu Thr Ser Asn Ile Asn Asp Phe Ser Ala Gly Val Ala Asn Arg Ser
305                 310                 315                 320


Ala Ser Ile Arg Ile Pro Arg Thr Val Gly Gln Glu Lys Lys Gly Tyr
                325                 330                 335


Phe Glu Asp Arg Arg Pro Ser Ala Asn Cys Asp Pro Phe Ala Val Thr
            340                 345                 350


Glu Ala Ile Val Arg Thr Cys Leu Leu Asn Glu Thr Gly Asp Glu Pro
        355                 360                 365


Phe Gln Tyr Lys Asn
    370


<210>  127
<211>  373
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  127

Met Ala Thr Ser Ala Ser Ser His Leu Asn Lys Gly Ile Lys Gln Met
1               5                   10                  15


Tyr Met Asn Leu Pro Gln Gly Glu Lys Ile Gln Leu Met Tyr Ile Trp
            20                  25                  30
```

```
Val Asp Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp
        35                  40                  45

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

Ser Ser Thr Phe Gln Ser Glu Gly Ser Asn Ser Asp Met Tyr Leu His
65                  70                  75                  80

Pro Val Ala Met Phe Arg Asp Pro Phe Arg Arg Asp Pro Asn Lys Leu
                85                  90                  95

Val Phe Cys Glu Val Phe Lys Tyr Asn Arg Lys Pro Ala Glu Thr Asn
            100                 105                 110

Leu Arg His Ser Cys Lys Arg Ile Met Asp Met Val Ser Ser Gln His
        115                 120                 125

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

His Pro Phe Gly Trp Pro Ser Asn Gly Phe Pro Gly Pro Gln Gly Pro
145                 150                 155                 160

Tyr Tyr Cys Gly Val Gly Ala Asp Lys Ala Tyr Gly Arg Asp Ile Val
                165                 170                 175

Glu Ala His Tyr Arg Ala Cys Leu Tyr Ala Gly Ile Lys Ile Thr Gly
            180                 185                 190

Thr Asn Ala Glu Val Met Pro Ala Gln Trp Glu Phe Gln Ile Gly Pro
        195                 200                 205

Cys Glu Gly Ile Arg Met Gly Asp His Leu Trp Val Ala Arg Phe Ile
    210                 215                 220

Leu His Arg Val Cys Glu Asp Phe Gly Val Ile Ala Thr Phe Asp Pro
225                 230                 235                 240
```

```
Lys Pro Ile Pro Gly Asn Trp Asn Gly Ala Gly Cys His Thr Asn Phe
                245                 250                 255


Ser Thr Lys Ala Met Arg Glu Glu Asn Gly Leu Arg Cys Ile Glu Glu
            260                 265                 270


Ala Ile Asp Lys Leu Ser Lys Arg His Gln Tyr His Ile Arg Ala Tyr
        275                 280                 285


Asp Pro Lys Gly Gly Leu Asp Asn Ala Arg Arg Leu Thr Gly Phe His
    290                 295                 300


Glu Thr Ser Asn Ile Asn Asp Phe Ser Ala Gly Val Ala Asn Arg Ser
305                 310                 315                 320


Ala Ser Ile Arg Ile Pro Arg Ile Val Gly Gln Glu Lys Lys Gly Tyr
                325                 330                 335


Phe Glu Asp Arg Arg Pro Ser Ala Asn Cys Asp Pro Tyr Ala Val Thr
            340                 345                 350


Glu Ala Ile Val Arg Thr Cys Leu Leu Asn Glu Thr Gly Asp Glu Pro
        355                 360                 365


Phe Gln Tyr Lys Asn
    370


<210>  128
<211>  373
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic

<400>  128

Met Ala Thr Ser Ala Ser Ser His Leu Asn Lys Gly Ile Lys Gln Met
1               5                   10                  15
```

```
Tyr Met Ser Leu Pro Gln Gly Glu Lys Ile Gln Ala Met Tyr Ile Trp
            20                  25                  30

Val Asp Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp
        35                  40                  45

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

Ser Ser Thr Phe Gln Ser Glu Gly Ser Asn Ser Asp Met Tyr Leu His
65                  70                  75                  80

Pro Val Ala Met Phe Arg Asp Pro Phe Arg Lys Asp Pro Asn Lys Leu
                85                  90                  95

Val Leu Cys Glu Val Phe Lys Tyr Asn Arg Lys Pro Ala Glu Thr Asn
            100                 105                 110

Leu Arg His Ile Cys Lys Arg Ile Met Asp Met Val Ser Asn Gln His
        115                 120                 125

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

His Pro Phe Gly Trp Pro Ser Asn Gly Phe Pro Gly Pro Gln Gly Pro
145                 150                 155                 160

Tyr Tyr Cys Gly Val Gly Ala Asp Lys Ala Tyr Gly Arg Asp Ile Val
                165                 170                 175

Glu Ala His Tyr Arg Ala Cys Leu Tyr Ala Gly Val Lys Ile Thr Gly
            180                 185                 190

Thr Asn Ala Glu Val Met Pro Ala Gln Trp Glu Phe Gln Ile Gly Pro
        195                 200                 205
```

```
Cys Glu Gly Ile Arg Met Gly Asp His Leu Trp Ile Ala Arg Phe Ile
    210                 215                 220

Leu His Arg Val Cys Glu Asp Phe Gly Val Ile Ala Thr Phe Asp Pro
225                 230                 235                 240

Lys Pro Ile Pro Gly Asn Trp Asn Gly Ala Gly Cys His Thr Asn Phe
                245                 250                 255

Ser Thr Lys Ala Met Arg Glu Glu Asn Gly Leu Lys Cys Ile Glu Glu
            260                 265                 270

Ala Ile Asp Lys Leu Ser Lys Arg His Gln Tyr His Ile Arg Ala Tyr
        275                 280                 285

Asp Pro Lys Gly Gly Leu Asp Asn Ala Arg Arg Leu Thr Gly Phe His
    290                 295                 300

Glu Thr Ser Asn Ile Asn Asp Phe Ser Ala Gly Val Ala Asn Arg Ser
305                 310                 315                 320

Ala Ser Ile Arg Ile Pro Arg Thr Val Gly Gln Glu Lys Lys Gly Tyr
                325                 330                 335

Phe Glu Asp Arg Arg Pro Ser Ala Asn Cys Asp Pro Tyr Ala Val Thr
            340                 345                 350

Glu Ala Ile Val Arg Thr Cys Leu Leu Asn Glu Thr Gly Asp Glu Pro
        355                 360                 365

Phe Gln Tyr Lys Asn
    370
```

<210> 129
<211> 373
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 129

```
Met Ala Thr Ser Ala Ser Ser His Leu Asn Lys Asn Ile Lys Gln Met
1               5                  10                  15


Tyr Leu Cys Leu Pro Gln Gly Glu Lys Val Gln Ala Met Tyr Ile Trp
            20                  25                  30


Val Asp Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp
        35                  40                  45


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


Ser Ser Thr Phe Gln Ser Glu Gly Ser Asn Ser Asp Met Tyr Leu Ser
65                  70                  75                  80


Pro Val Ala Met Phe Arg Asp Pro Phe Arg Arg Glu Pro Asn Lys Leu
                85                  90                  95


Val Phe Cys Glu Val Phe Lys Tyr Asn Arg Lys Pro Ala Glu Thr Asn
            100                 105                 110


Leu Arg His Ser Cys Lys Arg Ile Met Asp Met Val Ser Asn Gln His
        115                 120                 125


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


His Pro Phe Gly Trp Pro Ser Asn Gly Phe Pro Gly Pro Gln Gly Pro
145                 150                 155                 160


Tyr Tyr Cys Gly Val Gly Ala Asp Lys Ala Tyr Gly Arg Asp Ile Val
                165                 170                 175


Glu Ala His Tyr Arg Ala Cys Leu Tyr Ala Gly Val Lys Ile Thr Gly
            180                 185                 190
```

```
Thr Asn Ala Glu Val Met Pro Ala Gln Trp Glu Phe Gln Ile Gly Pro
        195                 200                 205

Cys Glu Gly Ile His Met Gly Asp His Leu Trp Val Ala Arg Phe Ile
    210                 215                 220

Leu His Arg Val Cys Glu Asp Phe Gly Val Ile Ala Thr Phe Asp Pro
225                 230                 235                 240

Lys Pro Ile Pro Gly Asn Trp Asn Gly Ala Gly Cys His Thr Asn Phe
                245                 250                 255

Ser Thr Lys Ala Met Arg Glu Glu Asn Gly Leu Lys His Ile Glu Glu
            260                 265                 270

Ala Ile Glu Lys Leu Ser Lys Arg His Gln Tyr His Ile Arg Ala Tyr
        275                 280                 285

Asp Pro Lys Gly Gly Leu Asp Asn Ala Arg Arg Leu Thr Gly Phe His
    290                 295                 300

Glu Thr Ser Asn Ile Asn Asp Phe Ser Ala Gly Val Ala Asn Arg Ser
305                 310                 315                 320

Ala Ser Ile Arg Ile Pro Arg Thr Val Gly Gln Glu Lys Lys Gly Tyr
                325                 330                 335

Phe Glu Asp Arg Arg Pro Ser Ala Asn Cys Asp Pro Phe Ala Val Thr
            340                 345                 350

Glu Ala Ile Val Arg Thr Cys Leu Leu Asn Glu Thr Gly Asp Glu Pro
        355                 360                 365

Phe Gln Tyr Lys Asn
    370
```

<210> 130
<211> 394
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 130

```
Met Ala Thr Ser Ala Ser Ser His Leu Asn Lys Asn Ile Lys Gln Met
1               5                   10                  15


Tyr Leu Cys Leu Pro Gln Gly Glu Lys Val Gln Ala Met Tyr Ile Trp
            20                  25                  30


Val Asp Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp
        35                  40                  45


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


Ser Ser Thr Phe Gln Ser Glu Gly Ser Asn Ser Asp Met Tyr Leu Ser
65                  70                  75                  80


Pro Val Ala Met Phe Arg Asp Pro Phe Arg Arg Glu Pro Asn Lys Leu
                85                  90                  95


Val Phe Cys Glu Val Phe Lys Tyr Asn Arg Lys Pro Ala Glu Thr Asn
            100                 105                 110


Leu Arg His Ser Cys Lys Arg Ile Met Asp Met Val Ser Asn Gln His
        115                 120                 125


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


His Pro Phe Gly Trp Pro Ser Asn Gly Phe Pro Gly Pro Gln Gly Pro
145                 150                 155                 160
```

```
Tyr Tyr Cys Gly Val Gly Ala Asp Lys Ala Tyr Gly Arg Asp Ile Val
                165                 170                 175

Glu Ala His Tyr Arg Ala Cys Leu Tyr Ala Gly Val Lys Ile Thr Gly
            180                 185                 190

Thr Asn Ala Glu Val Met Pro Ala Gln Trp Glu Phe Gln Ile Gly Pro
        195                 200                 205

Cys Glu Gly Ile His Met Gly Asp His Leu Trp Val Ala Arg Phe Ile
    210                 215                 220

Leu His Arg Val Cys Glu Asp Phe Gly Val Ile Ala Thr Phe Asp Pro
225                 230                 235                 240

Lys Pro Ile Pro Gly Asn Trp Asn Gly Ala Gly Cys His Thr Asn Phe
                245                 250                 255

Ser Thr Lys Ala Met Arg Glu Glu Asn Gly Leu Lys His Ile Glu Glu
            260                 265                 270

Ala Ile Glu Lys Leu Ser Lys Arg His Gln Tyr His Ile Arg Ala Tyr
        275                 280                 285

Asp Pro Lys Gly Gly Leu Asp Asn Ala Arg Arg Leu Thr Gly Phe His
    290                 295                 300

Glu Thr Ser Asn Ile Asn Asp Phe Ser Ala Gly Val Ala Asn Arg Ser
305                 310                 315                 320

Ala Ser Ile Arg Ile Pro Arg Thr Val Gly Gln Glu Lys Lys Gly Tyr
                325                 330                 335

Phe Glu Asp Arg Arg Pro Ser Ala Asn Cys Asp Pro Phe Ala Val Thr
            340                 345                 350

Glu Ala Ile Val Arg Thr Cys Leu Leu Asn Glu Thr Gly Asp Glu Pro
        355                 360                 365
```

Phe Gln Tyr Lys Asn Trp Ile Arg Ser Asp Met Ile Arg Tyr Ile Asp
370 375 380

Glu Phe Gly Gln Thr Thr Thr Arg Met Gln
385 390

<210> 131
<211> 1122
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 131
atggccacct cagcaagttc ccacttgaac aaaaacatca agcaaatgta cttgtgcctg 60

ccccagggtg agaaagtcca agccatgtat atctgggttg atggtactgg agaaggactg 120

cgctgcaaaa cccgcaccct ggactgtgag cccaagtgtg tagaagagtt acctgagtgg 180

aattttgatg gctctagtac ctttcagtct gagggctcca acagtgacat gtatctcagc 240

cctgttgcca tgtttcggga ccccttccgc agagatccca acaagctggt gttctgtgaa 300

gttttcaagt acaaccggaa gcctgcagag actaatttaa ggcactcgtg taaacggata 360

atggacatgg tgagcaacca gcacccctgg tttggaatgg aacaggagta tactctgatg 420

ggaacagatg ggcacccttt tggttggcct tccaatggct ttcctgggcc ccaaggtccg 480

tattactgtg gtgtgggcgc agacaaagcc tatggcaggg atatcgtgga ggctcactac 540

cgcgcctgct tgtatgctgg ggtcaagatt acaggaacaa atgctgaggt catgcctgcc 600

cagtgggagt tccaaatagg accctgtgaa ggaatccgca tgggagatca tctctgggtg 660

gcccgtttca tcttgcatcg agtatgtgag gactttgggg taatagcaac ctttgacccc 720

aagcccattc ctgggaactg gaatggtgca ggctgccata ccaactttag caccaaggcc 780

atgcgggagg agaatggtct gaagcacatc gaggaggcca tcgagaaact aagcaagcgg 840

caccggtacc acattcgagc ctacgatccc aaggggggcc tggacaatgc ccgtcgtctg 900

actgggttcc acgaaacgtc caacatcaac gacttttctg ctggtgtcgc caatcgcagt 960

gccagcatcc gcattccccg gactgtcggc caggagaaga aaggttactt tgaagatcgc 1020

cgcccctctg ccaattgtga ccccttttgca gtgacagaag ccatcgtccg cacatgcctt 1080

ctcaatgaga ctggcgacga gcccttccaa tacaaaaact aa 1122

<210> 132
<211> 1122
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 132
atggccacct cagcaagttc ccacttgaac aaaggaatca agcaaatgta catgaacctg 60

ccccagggtg agaaaatcca actgatgtat atctgggttg atggtactgg agaaggactg 120

cgctgcaaaa cccgcaccct ggactgtgac cccaagtgtg tagaagagtt acctgagtgg 180

aattttgatg gctctagtac ctttcagtct gagggctcca acagtgacat gtatctccac 240

cctgttgcca tgtttcggga ccccttccgc agagatccca acaagctggt gttctgtgaa 300

gttttcaagt acaaccggaa gcctgcagag acaaatttaa ggcactcgtg taaacggata 360

atggacatgg tgagctccca gcacccctgg tttggaatgg aacaggagta tactctgatg 420

ggaacagatg ggcacccttt tggttggcct tccaatggct ttcctgggcc ccaaggtccg 480

tattactgtg gtgtgggcgc agacaaagcc tatggcaggg atatcgtgga ggctcactac 540

cgcgcctgct tgtatgctgg gatcaagatt acaggaacaa atgctgaggt catgcctgcc 600

cagtgggagt tccaaatagg accctgtgaa ggaatccgca tgggagatca tctctgggtg 660

gcccgtttca tcttgcatcg agtatgtgag gactttgggg taatagcaac ctttgacccc 720

aagcccattc ctgggaactg gaatggtgca ggctgccata ccaactttag caccaaggcc 780

atgcgggagg agaatggtct gcggtgcatc gaggaggcca tcgacaaact aagcaagcgg 840

caccagtacc acattcgagc ctacgatccc aaggggggcc tggacaatgc ccgtcgtctg 900

actgggttcc acgaaacgtc caacatcaac gacttttctg ctggtgtcgc caatcgcagt 960

gccagcatcc gcattccccg gatcgtcggc caggagaaga aaggttactt tgaagatcgc 1020

cgcccctctg ccaattgtga cccctacgca gtgacagaag ccatcgtccg cacatgcctt 1080

ctcaatgaga ctggcgacga gcccttccaa tacaaaaact aa 1122

<210> 133
<211> 1122
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 133
atggccacct cagcaagttc ccacttgaac aaaggcatca agcaaatgta catgtccctg 60

ccccagggtg agaaaatcca agccatgtat atctgggttg atggtaccgg agaaggactg 120

cgctgcaaga cccgtaccct ggactgtgac cccaagtgtg tggaagagtt acctgagtgg 180

aactttgatg gctctagtac ctttcagtct gaaggctcca acagcgacat gtacctccat 240

cctgttgcca tgtttcggga ccccttccgc aaagacccca acaagctggt gctatgtgaa 300

gttttcaagt ataaccggaa gcctgcagaa accaacttga ggcacatctg taaacggata 360

atggacatgg tgagcaacca gcacccctgg tttggaatgg agcaggaata tactcttatg 420

ggaacagacg gccacccatt tggttggcct tccaatggct tccctggacc ccaaggcccg 480

tattactgcg gtgtgggagc agacaaggcc tacggcaggg acatcgtgga ggctcactac 540

cgggcctgct tgtatgctgg agtcaagatc acggggacaa atgcggaggt tatgcctgcc 600

cagtgggaat tccagatagg accctgtgag ggaatccgaa tgggagatca tctttggata 660

gcccgtttta tcttgcatcg ggtgtgcgaa gattttgggg tgatagcaac ctttgacccc 720

aagcccattc cagggaactg gaatggtgca ggctgccata ccaacttcag caccaaggcc 780

atgcgggagg agaatggtct gaagtgcatt gaggaggcca ttgacaaact gagcaagagg 840

caccagtacc acatccgcgc ctacgatccc aaggggggcc tggacaacgc ccggcgtctg 900

actggattcc acgaaacctc caacatcaac gacttttctg ccggtgttgc caaccgctcc 960

gccagtatcc gcattccccg gactgtcggc caggagaaga agggctactt tgaggaccgt 1020

cggccttctg ccaattgtga cccctatgcg gtgacagaag ccatcgtccg cacgtgtctc 1080

ctcaacgaaa caggcgacga acccttccaa tacaagaact aa 1122

<210> 134
<211> 1122
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 134
atggccacct cagcaagttc ccacttgaac aaaaacatca agcaaatgta cctgtgcctg 60

ccccagggtg agaaagtcca agccatgtat atctgggttg atggtactgg agaaggactg 120

cgctgcaaaa cccgcaccct ggactgtgag cccaagtgtg tagaagagtt acctgagtgg 180

aattttgatg gctctagtac ctttcagtct gagggctcca acagtgacat gtatctcagc 240

cctgttgcca tgtttcggga ccccttccgc cgggagccca acaagctggt gttctgtgaa 300

gttttcaagt acaaccggaa gcctgcagag acaaatttaa ggcactcctg taaacggata 360

atggacatgg tgagcaacca gcacccctgg tttggaatgg aacaggagta tactctgatg 420

ggaacagatg ggcacccttt tggttggcct tccaatggct ttcctgggcc ccaaggtccg 480

tattactgtg gtgtgggcgc agacaaagcc tatggcaggg atatcgtgga ggctcactac 540

cgcgcctgct tgtatgctgg ggtcaagatt acaggaacaa atgctgaggt catgcctgcc 600

cagtgggagt tccaaatagg accctgtgaa ggaatccaca tgggagatca tctctgggtg 660

gcccgtttca tcttgcatcg agtatgtgag gactttgggg taatagcaac ctttgacccc 720

aagcccattc ctgggaactg gaatggtgca ggctgccata ccaactttag caccaaggcc 780

atgcgggagg agaatggtct gaagcacatc gaggaggcca tcgagaaact aagcaagcgg 840

caccagtacc acattcgagc ctacgatccc aaggggggcc tggacaatgc ccgtcgtctg 900

actgggttcc acgaaacgtc caacatcaac gacttttctg ctggtgtcgc caatcgcagt 960

gccagcatcc gcattccccg gactgtcggc caggagaaga aaggttactt tgaagatcgc 1020

cgcccctctg ccaattgtga ccccttgca gtgacagaag ccatcgtccg cacatgcctt 1080

ctcaatgaga ctggcgacga gcccttccaa tacaaaaact aa 1122

<210> 135
<211> 1228
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 135
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ttcgaccatt gaactgcatc gtcgccgtgt cccaaaatat ggggattggc aagaacggag 480

atcttccctg gcctccgctc aggaacgagt tcaagtactt ccaaagaatg accacaacct 540

cttcagtgga aggtaaacag aatctggtga ttatgggtag gaaaacctgg ttctccattc 600

ctgagaagaa tcgaccttta aaggacagaa ttaatatagt tctcagtaga gaactcaaag 660

aaccaccacg aggagctcat tttcttgcca aaagtttgga tgatgcctta agacttattg 720

aacaaccgga attggcaagt aaagtagaca tggtttggat agtcggaggc agttctgttt 780

accaggaagc catgaatcaa ccaggccacc tcagactctt tgtgacaagg atcatgcagg 840

aatttgaaag tgacacgttt ttcccagaaa ttgatttggg gaaatataaa cttctcccag 900

aatacccagg cgtcctctct gaggtccagg aggaaaaagg catcaagtat aagtttgaag 960

tctacgagaa gaaagactaa tggatccgct cagacatgat aagatacatt gatgagtttg 1020

gacaaaccac aactagaatg cagtgaaaaa aatgctttat ttgtgaaatt tgtgatgcta 1080

ttgctttatt tgtaaccatt ataagctgca ataaacaagt taacaacaac aattgcattc 1140

attttatgtt tcaggttcag ggggaggtgt gggaggtttt ttaaagcaag taaaacctct 1200

acaaatgtgg taggcgcgcc gaagacaa 1228

<210> 136
<211> 1026
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 136
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaataaat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gatggttcga 240

ccattgaact gcatcgtcgc cgtgtcccaa aatatgggga ttggcaagaa cggagacttg 300

ccctggcctc cgctcaggaa cgagttcaag tacttccaaa gaatgaccac aacctcttca 360

gtggaaggta aacagaatct ggtgattatg ggtaggaaaa cctggttctc cattcctgag 420

aagaatcgac ctttaaagga cagaattaat atagttctca gtagagaact caaagaacca 480

ccacgaggag ctcattttct tgccaaaagt ttggatgatg ccttaagact tattgaacaa 540

ccggaattgg caagtaaagt agacatggtt tggatagtcg gaggcagttc tgtttaccag 600

gaagccatga atcaaccagg ccacctcaga ctctttgtga caaggatcat gcaggaattt 660

gaaagtgaca cgtttttccc agaaattgat ttggggaaat ataaacttct cccagaatac 720

ccaggcgtcc tctctgaggt ccaggaggaa aaaggcatca agtataagtt tgaagtctac 780

gagaagaaag actaatacca catttgtaga ggttttactt gctttaaaaa acctcccaca 840

cctccccctg aacctgaaac ataaaatgaa tgcaattgtt gttgttaact tgtttattgc 900

agcttataat ggttacaaat aaagcaatag catcacaaat ttcacaaata aagcattttt 960

ttcactgcat tctagttgtg gtttgtccaa actcatcaat gtatcttatc atgtctggga 1020

agacac 1026

<210> 137
<211> 1712
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 137
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

gttcgaccat tgaactgcat cgtcgccgtg tcccaaaata tggggattgg caagaacgga 300

gacttgccct ggcctccgct caggaacgag ttcaagtact tccaaagaat gaccacaacc 360

tcttcagtgg aaggtaaaca gaatctggtg attatgggta ggaaaacctg gttctccatt 420

cctgagaaga atcgaccttt aaaggacaga attaatatag ttctcagtag agaactcaaa 480

gaaccaccac gaggagctca ttttcttgcc aaaagtttgg atgatgcctt aagacttatt 540

gaacaaccgg aattggcaag taaagtagac atggtttgga tagtcggagg cagttctgtt 600

taccaggaag ccatgaatca accaggccac ctcagactct ttgtgacaag gatcatgcag 660

gaatttgaaa gtgacacgtt tttcccagaa attgatttgg ggaaatataa acttctccca 720

gaatacccag gcgtcctctc tgaggtccag gaggaaaaag gcatcaagta taagtttgaa 780

gtctacgaga agaaagacta attagacttt gagtgatctt gagcctttcc tagttcatcc 840

caccccgccc cagagagatc tttgtgaagg aaccttactt ctgtggtgtg acataattgg 900

acaaactacc tacagagatt taaagctcta aggtaaatat aaaattttta agtgtataat 960

gtgttaaact actgattcta attgtttgtg tattttagat tccaacctat ggaactgatg 1020

aatgggagca gtggtggaat gcctttaatg aggaaaacct gttttgctca gaagaaatgc 1080

catctagtga tgatgaggct actgctgact ctcaacattc tactcctcca aaaaagaaga 1140

gaaaggtaga agatcccaag gactttcctt cagaattgct aagtttttg agtcatgctg 1200

tgtttagtaa tagaactctt gcttgctttg ctatttacac cacaaaggaa aaagctgcac 1260

tgctatacaa gaaaattatg gaaaaatatt ctgtaacctt tataagtagg cataacagtt 1320

ataatcataa catactgttt tttcttactc cacacaggca tagagtgtct gctattaata 1380

actatgctca aaaattgtgt acctttagct ttttaatttg taaaggggtt aataaggaat 1440

atttgatgta tagtgccttg actagagatc ataatcagcc ataccacatt tgtagaggtt 1500

ttacttgctt taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca 1560

attgttgttg ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc 1620

acaaatttca caaataaagc attttttttca ctgcattcta gttgtggttt gtccaaactc 1680

atcaatgtat cttatcatgt ctgggaagac ac 1712

<210> 138
<211> 1064
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 138
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca ggcctggttg 240

aggaacctgt taagacggct ccgggaaaaa aggttcgacc attgaactgc atcgtcgccg 300

tgtcccaaaa tatggggatt ggcaagaacg gagacttgcc ctggcctccg ctcaggaacg 360

agttcaagta cttccaaaga atgaccacaa cctcttcagt ggaaggtaaa cagaatctgg 420

tgattatggg taggaaaacc tggttctcca ttcctgagaa gaatcgacct ttaaaggaca 480

gaattaatat agttctcagt agagaactca aagaaccacc acgaggagct cattttcttg 540

ccaaaagttt ggatgatgcc ttaagactta ttgaacaacc ggaattggca agtaaagtag 600

acatggtttg gatagtcgga ggcagttctg tttaccagga agccatgaat caaccaggcc 660

acctcagact ctttgtgaca aggatcatgc aggaatttga aagtgacacg tttttcccag 720

aaattgattt ggggaaatat aaacttctcc cagaataccc aggcgtcctc tctgaggtcc 780

aggaggaaaa aggcatcaag tataagtttg aagtctacga gaagaaagac taataccaca 840

tttgtagagg ttttacttgc tttaaaaaac ctcccacacc tccccctgaa cctgaaacat 900

aaaatgaatg caattgttgt tgttaacttg tttattgcag cttataatgg ttacaaataa 960

agcaatagca tcacaaattt cacaaataaa gcatttttt cactgcattc tagttgtggt 1020

ttgtccaaac tcatcaatgt atcttatcat gtctgggaag acac 1064

<210> 139
<211> 1358
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 139
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

gtaaggccac tgaactgtat tgtggcggta agtcagaaca tgggtatagg taagaatggt 300

gacttgcctt ggcctccgct tcggaacgaa ttcaagtatt tccaacgcat gactactacc 360

tcaagtgtgg aaggtaagca aaatctggta attatgggac gtaagacctg gttttccatt 420

cccgaaaaga acaggccact caaggaccgg atcaacatcg tgctctcgcg agaactgaag 480

gagcccccgc gaggtgcgca cttcctggca aagtcactgg acgacgccct gcggctgatt 540

gagcagccag agctggcaag taaggtagat atggtatgga tagtaggtgg gtcaagtgtg 600

tatcaggagg cgatgaacca gccaggtcac ttgaggttgt ttgtgactcg gatcatgcaa 660

gagttcgagt cagacacttt cttccccgag atcgacctag gtaagtacaa gttactgcca 720

gagtacccag gtgtgttaag tgaggtgcaa gaggaaaaag gtatcaagta caagttcgag 780

gtatatgaaa agaaggatta attagacttt gagtgatctt gagcctttcc tagttcatcc 840

caccccgccc cagagagatc tttgtgaagg aaccttactt ctgtggtgtg acataattgg 900

acaaactacc tacagagatt taaagctcta aggtaaatat aaaattttta agtgtataat 960

gtgttaaact actgattcta attgtttgtg tattttagat tccaacctat ggaactgatg 1020

aatgggagca gtggtggaat gcctttaatg aggaaaacct gttttgctca gaagaaatgc 1080

catctagtga tgatgaggct actgctgact ctcaacattc tactccttac cacatttgta 1140

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 1200

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 1260

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 1320

aaactcatca atgtatctta tcatgtctgg gaagacac 1358

<210> 140
<211> 1358
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 140
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

gtaaggccac tgaactgtat tgtggcggta agtcagaaca tgggtatagg taagaatggt 300

gacttgcctt ggcctccgct tcggaacgaa ttcaagtatt tccaacgcat gactactacc 360

tcaagtgtgg aaggtaagca aaatctggta attatgggac gtaagacctg gttttccatt 420

cccgaaaaga acaggccact caaggaccgg atcaacatcg tgctctcgcg agaactgaag 480

gagcccccgc gaggtgcgca cttcctggca aagtcactgg acgacgccct gcggctgatt 540

gagcagccag agctggcaag taaggtagat atggtatgga tagtaggtgg gtcaagtgtg 600

tatcaggagg cgatgaacca gccaggtcac ttgaggttgt ttgtgactcg gatcatgcaa 660

gagttcgagt cagacacttt cttccccgag atcgacctag gtaagtacaa gttactgcca 720

gagtacccag gtgtgttaag tgaggtgcaa gaggaaaaag gcatcaagta caagttcgag 780

gtatatgaaa agaaggatta attagacttt gagtgatctt gagcctttcc tagttcatcc 840

caccccgccc cagagagatc tttgtgaagg aaccttactt ctgtggtgtg acataattgg 900

acaaactacc tacagagatt taaagctcta aggtaaatat aaaattttta agtgtataat 960

gtgttaaact actgattcta attgtttgtg tattttagat tccaacctat ggaactgatg 1020

aatgggagca gtggtggaat gcctttaatg aggaaaacct gttttgctca gaagaaatgc 1080

catctagtga tgatgaggct actgctgact ctcaacattc tactccttac cacatttgta 1140

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 1200

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 1260

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 1320

aaactcatca atgtatctta tcatgtctgg gaagacac 1358

<210> 141
<211> 1712
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 141
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

gttcgaccat tgaactgcat cgtcgccgtg tcccaaaata tggggattgg caagaacgga 300

gacttgccct ggcctccgct caggaacgag ttcaagtact tccaaagaat gaccacaacc 360

tcttcagtgg aaggtaaaca gaatctggtg attatgggta ggaaaacctg gttctccatt 420

cctgagaaga atcgaccttt aaaggacaga attaatatag ttctcagtag agaactcaaa 480

gaaccaccac gaggagctca ttttcttgcc aaaagtttgg atgatgcctt aagacttatt 540

gaacaaccgg aattggcaag taaagtagac atggtttgga tagtcggagg cagttctgtt 600

taccaggaag ccatgaatca accaggccac ctcagactct ttgtgacaag gatcatgcag 660

gaatttgaaa gtgacacgtt tttcccagaa attgatttgg ggaaatataa acttctccca 720

gagtacccag gtgtgttaag tgaggtgcaa gaggaaaaag gtatcaagta caagttcgag 780

gtatatgaaa agaaggatta attagacttt gagtgatctt gagcctttcc tagttcatcc 840

caccccgccc cagagagatc tttgtgaagg aaccttactt ctgtggtgtg acataattgg 900

acaaactacc tacagagatt taaagctcta aggtaaatat aaaattttta agtgtataat 960

gtgttaaact actgattcta attgtttgtg tattttagat tccaacctat ggaactgatg 1020

aatgggagca gtggtggaat gcctttaatg aggaaaacct gttttgctca gaagaaatgc 1080

catctagtga tgatgaggct actgctgact ctcaacattc tactcctcca aaaaagaaga 1140

gaaaggtaga agatcccaag gactttcctt cagaattgct aagtttttg agtcatgctg 1200

tgtttagtaa tagaactctt gcttgctttg ctatttacac cacaaaggaa aaagctgcac 1260

tgctatacaa gaaaattatg gaaaaatatt ctgtaacctt tataagtagg cataacagtt 1320

ataatcataa catactgttt tttcttactc cacacaggca tagagtgtct gctattaata 1380

actatgctca aaaattgtgt acctttagct ttttaatttg taaaggggtt aataaggaat 1440

atttgatgta tagtgccttg actagagatc ataatcagcc ataccacatt tgtagaggtt 1500

ttacttgctt taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca 1560

attgttgttg ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc 1620

acaaatttca caaataaagc attttttttca ctgcattcta gttgtggttt gtccaaactc 1680

atcaatgtat cttatcatgt ctgggaagac ac 1712

<210> 142
<211> 1541
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 142
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gagatatgtt tgagaatacc actttatccc gcgtcaggga gaggcagtgc 300

gtaaaaagac gcggactcat gtgaaatact ggtttttagt gcgccagatc tcatctcgcg 360

caacctattt tcccctcgaa cacttttaa gccgtagata aacaggctgg gacacttcac 420

atggtaaggc cactgaactg tattgtggcg gtaagtcaga acatgggtat aggtaagaat 480

ggtgacttgc cttggcctcc gcttcggaac gaattcaagt atttccaacg catgactact 540

acctcaagtg tggaaggtaa gcaaaatctg gtaattatgg gacgtaagac ctggttttcc 600

attcccgaaa agaacaggcc actcaaggac cggatcaaca tcgtgctctc gcgagaactg 660

aaggagcccc cgcgaggtgc gcacttcctg gcaaagtcac tggacgacgc cctgcggctg 720

attgagcagc cagagctggc aagtaaggta gatatggtat ggatagtagg tgggtcaagt 780

gtgtatcagg aggcgatgaa ccagccaggt cacttgaggt tgtttgtgac tcggatcatg 840

caagagttcg agtcagacac tttcttcccc gagatcgacc taggtaagta caagttactg 900

ccagagtacc caggtgtgtt aagtgaggtg caagaggaaa aaggtatcaa gtacaagttc 960

gaggtatatg aaaagaagga ttaattagac tttgagtgat cttgagcctt tcctagttca 1020

tcccaccccg ccccagagag atctttgtga aggaacctta cttctgtggt gtgacataat 1080

tggacaaact acctacagag atttaaagct ctaaggtaaa tataaaattt ttaagtgtat 1140

aatgtgttaa actactgatt ctaattgttt gtgtatttta gattccaacc tatggaactg 1200

atgaatggga gcagtggtgg aatgccttta atgaggaaaa cctgttttgc tcagaagaaa 1260

tgccatctag tgatgatgag gctactgctg actctcaaca ttctactcct taccacattt 1320

gtagaggttt tacttgcttt aaaaaacctc ccacacctcc ccctgaacct gaaacataaa 1380

atgaatgcaa ttgttgttgt taacttgttt attgcagctt ataatggtta caaataaagc 1440

aatagcatca caaatttcac aaataaagca ttttttttcac tgcattctag ttgtggtttg 1500

tccaaactca tcaatgtatc ttatcatgtc tgggaagaca c 1541

<210> 143
<211> 1321
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 143
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ttcgaccatt gaactgcatc gtcgccgtgt cccaaaatat ggggattggc aagaacggag 480

atcttccctg gcctccgctc aggaacgagt tcaagtactt ccaaagaatg accacaacct 540

cttcagtgga aggtaaacag aatctggtga ttatgggtag gaaaacctgg ttctccattc 600

ctgagaagaa tcgaccttta aaggacagaa ttaatatagt tctcagtaga gaactcaaag 660

aaccaccacg aggagctcat tttcttgcca aaagtttgga tgatgcctta agacttattg 720

aacaaccgga attggcaagt aaagtagaca tggtttggat agtcggaggc agttctgttt 780

accaggaagc catgaatcaa ccaggccacc tcagactctt tgtgacaagg atcatgcagg 840

aatttgaaag tgacacgttt ttcccagaaa ttgatttggg gaaatataaa cttctcccag 900

aatacccagg cgtcctctct gaggtccagg aggaaaaagg catcaagtat aagtttgaag 960

tctacgagaa gaaagactaa tggatccgcc cacagacctg gtgaccgtca ggaagaagat 1020

tcagtgagag gacacgaggt atgtcatggt ttttaatcaa taaataaaga ggttttattc 1080

atcggacagt cgttgtagcc tgtaaaagac tcgccccgga gggggttccc ccgatgtgag 1140

gggcatgcag tagtatggtg tcctgagtgt ctcggatgcg tccttgaact cgcactctac 1200

cgccgtgggg gttaataaag ttttgctgcg ccggtagggg gggaggccga ggataataaa 1260

gttgctacgt actggttgaa gtctaacaat ctctcggggg gatccggcgc gccgaagaca 1320

a 1321

<210> 144
<211> 1899
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 144
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gagatatgtt tgagaatacc actttatccc gcgtcaggga gaggcagtgc 300

gtaaaaagac gcggactcat gtgaaatact ggtttttagt gcgccagatc tctataatct 360

cgcgcaacct attttcccct cgaacacttt ttaagccgta gataaacagg ctgggacact 420

tcacatggtt cgaccattga actgcatcgt cgccgtgtcc caaaatatgg ggattggcaa 480

gaacggagac ttgccctggc ctccgctcag gaacgagttc aagtacttcc aaagaatgac 540

cacaacctct tcagtggaag gtaaacagaa tctggtgatt atgggtagga aaacctggtt 600

ctccattcct gagaagaatc gacctttaaa ggacagaatt aatatagttc tcagtagaga 660

actcaaagaa ccaccacgag gagctcattt tcttgccaaa agtttggatg atgccttaag 720

acttattgaa caaccggaat tggcaagtaa agtagacatg gtttggatag tcggaggcag 780

ttctgtttac caggaagcca tgaatcaacc aggccacctc agactctttg tgacaaggat 840

catgcaggaa tttgaaagtg acacgttttt cccagaaatt gatttgggga aatataaact 900

tctcccagaa tacccaggcg tcctctctga ggtccaggag gaaaaaggca tcaagtataa 960

gtttgaagtc tacgagaaga aagactaatt agactttgag tgatcttgag cctttcctag 1020

ttcatcccac cccgccccag agagatcttt gtgaaggaac cttacttctg tggtgtgaca 1080

taattggaca aactacctac agagatttaa agctctaagg taaatataaa atttttaagt 1140

gtataatgtg ttaaactact gattctaatt gtttgtgtat tttagattcc aacctatgga 1200

actgatgaat gggagcagtg gtggaatgcc tttaatgagg aaaacctgtt ttgctcagaa 1260

gaaatgccat ctagtgatga tgaggctact gctgactctc aacattctac tcctccaaaa 1320

aagaagagaa aggtagaaga tcccaaggac tttccttcag aattgctaag ttttttgagt 1380

catgctgtgt ttagtaatag aactcttgct tgctttgcta tttacaccac aaaggaaaaa 1440

gctgcactgc tatacaagaa aattatggaa aaatattctg taacctttat aagtaggcat 1500

aacagttata atcataacat actgtttttt cttactccac acaggcatag agtgtctgct 1560

attaataact atgctcaaaa attgtgtacc tttagctttt taatttgtaa aggggttaat 1620

aaggaatatt tgatgtatag tgccttgact agagatcata atcagccata ccacatttgt 1680

agaggtttta cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat 1740

gaatgcaatt gttgttgtta acttgtttat tgcagcttat aatggttaca aataaagcaa 1800

tagcatcaca aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc 1860

caaactcatc aatgtatctt atcatgtctg ggaagacac 1899

<210> 145
<211> 1049
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 145
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

gttcgaccat tgaactgcat cgtcgccgtg tcccaaaata tggggattgg caagaacgga 300

gatcttccct ggcctccgct caggaacgag ttcaagtact tccaaagaat gaccacaacc 360

tcttcagtgg aaggtaaaca gaatctggtg attatgggta ggaaaacctg gttctccatt 420

cctgagaaga atcgaccttt aaaggacaga attaatatag ttctcagtag agaactcaaa 480

gaaccaccac gaggagctca ttttcttgcc aaaagtttgg atgatgcctt aagacttatt 540

gaacaaccgg aattggcaag taaagtagac atggtttgga tagtcggagg cagttctgtt 600

taccaggaag ccatgaatca accaggccac ctcagactct ttgtgacaag gatcatgcag 660

gaatttgaaa gtgacacgtt tttcccagaa attgatttgg ggaaatataa acttctccca 720

gaatacccag gcgtcctctc tgaggtccag gaggaaaaag gcatcaagta taagtttgaa 780

gtctacgaga agaaagacta atggatccgc tcagacatga taagatacat tgatgagttt 840

ggacaaacca caactagaat gcagtgaaaa aaatgcttta tttgtgaaat ttgtgatgct 900

attgctttat ttgtaaccat tataagctgc aataaacaag ttaacaacaa caattgcatt 960

cattttatgt ttcaggttca gggggaggtg tgggaggttt tttaaagcaa gtaaaacctc 1020

tacaaatgtg gtaggcgcgc cgaagacaa 1049

<210> 146
<211> 1472
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 146
aagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat ggttcgacca ttgaactgca tcgtcgccgt gtcccaaaat atggggattg 720

gcaagaacgg agatcttccc tggcctccgc tcaggaacga gttcaagtac ttccaaagaa 780

tgaccacaac ctcttcagtg gaaggtaaac agaatctggt gattatgggt aggaaaacct 840

ggttctccat tcctgagaag aatcgacctt taaaggacag aattaatata gttctcagta 900

gagaactcaa agaaccacca cgaggagctc attttcttgc caaaagtttg gatgatgcct 960

taagacttat tgaacaaccg gaattggcaa gtaaagtaga catggtttgg atagtcggag 1020

gcagttctgt ttaccaggaa gccatgaatc aaccaggcca cctcagactc tttgtgacaa 1080

ggatcatgca ggaatttgaa agtgacacgt ttttcccaga aattgatttg gggaaatata 1140

aacttctccc agaataccca ggcgtcctct ctgaggtcca ggaggaaaaa ggcatcaagt 1200

ataagtttga agtctacgag aagaaagact aatggatccg ctcagacatg ataagataca 1260

ttgatgagtt tggacaaacc acaactagaa tgcagtgaaa aaaatgcttt atttgtgaaa 1320

tttgtgatgc tattgcttta tttgtaacca ttataagctg caataaacaa gttaacaaca 1380

acaattgcat tcattttatg tttcaggttc agggggaggt gtgggaggtt ttttaaagca 1440

agtaaaacct ctacaaatgt ggtagaagac aa 1472

<210> 147
<211> 1310
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 147
gtgtcttctt tctttatgtt ttaaatgcac tgatctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtt agtctttctt ctcgtagact 240

tcaaacttat acttgatgcc tttttcctcc tggacctcag agaggacgcc tgggtattct 300

gggagaagtt tatatttccc caaatcaatt tctgggaaaa acgtgtcact ttcaaattcc 360

tgcatgatcc ttgtcacaaa gagtctgagg tggcctggtt gattcatggc ttcctggtaa 420

acagaactgc ctccgactat ccaaaccatg tctactttac ttgccaattc cggttgttca 480

ataagtctta aggcatcatc caaacttttg gcaagaaaat gagctcctcg tggtggttct 540

ttgagttctc tactgagaac tatattaatt ctgtccttta aaggtcgatt cttctcagga 600

atggagaacc aggttttcct acccataatc accagattct gtttaccttc cactgaagag 660

gttgtggtca ttctttggaa gtacttgaac tcgttcctga gcggaggcca gggcaagtct 720

ccgttcttgc caatccccat attttgggac acggcgacga tgcagttcaa tggtcgaacc 780

atggtggcga cgtgcgctcc ggaggcttgc agaatgcgga acaccgcgcg ggcaggaaca 840

gggcccacac taccgcccca caccccgcct cccgcaccgc cccttcccgg ccgctgctct 900

cagaaagcga aggagcaaag ctgctattgg ccgctgcccc aaaggcctac ccgcttccat 960

tgctcagcgg tgctgtccat ctgcacgaga ctagtgagtc gtgctacttc catttgtcac 1020

gtcctgcacg acgcgagctg cggggcgggg gggaacttcc tgactagggg aggagtagaa 1080

ggtggcgcga aggggccacc aaagaacgga gccggttggc gcctaccggt ggatgtggaa 1140

tgtgtgcgag gccagaggcc acttgtgtag cgccaagtgc ccagcggggc tgctaaagcg 1200

catgctccag actgccttgg gaaaagcgcc tcccctaccc ggtagagaaa cttgatctgt 1260

cgccgcaatt caaacttcgt gaggctccgg tgcccgtcag tggaagacta 1310

<210> 148
<211> 1266
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 148
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcactatcag cccttctgcc 240

aaatctggta gctatagttg atgttcgagg cgaagtcttg ggtgaacacc ggcctaaagt 300

tgctcgggat ctcagggaag tacacatctc cttcgggttc gatgtcgatg gtggagatgt 360

gcagagtgtc cacttggtcg atcagtgact tgtagatttc gccccctccg gacacaatga 420

catggtcggt gatcttcttg aggttcgtga gagcgtcctt gatcgaaggg aagatcagca 480

catcctcatt gtcggaagtg aagctggatc tggtcacgac ggcgtatttc cggttcggca 540

gggcacccat ggattcgaaa gtcttgcgac cgacaagcaa ccactggttg taggtgatgg 600

ccttgaacag cagctgctct ccctttgcgg accagggaat atctgggccg ttcccaatca 660

ctccgttctt tgaaatcgcc accatggtgg cggacgaaag gcccggagat gaggaagagg 720

agaacagcgc ggcagacgtg cgcttttgaa gcgtgcagaa tgccgggcct ccggaggacc 780

ttcgggcgcc cgccccgccc ctgagcccgc ccctgagccc gcccccggac ccacccccttc 840

ccagcctctg agcccagaaa gcgaaggagc aaagctgcta ttggccgctg ccccaaaggc 900

ctacccgctt ccattgctca gcggtgctgt ccatctgcac gagactagtg agtcgtgcta 960

cttccatttg tcacgtcctg cacgacgcga gctgcggggc gggggggaac ttcctgacta 1020

ggggaggagt agaaggtggc gcgaaggggc caccaaagaa cggagccggt tggcgcctac 1080

cggtggatgt ggaatgtgtg cgaggccaga ggccacttgt gtagcgccaa gtgcccagcg 1140

gggctgctaa agcgcatgct ccagactgcc ttgggaaaag cgcctcccct acccggtaga 1200

gaaacttgat ctgtcgccgc aattcaaact tcgtgaggct ccggtgcccg tcagtgacct 1260

gctata 1266

<210> 149
<211> 1371
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 149
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcactattag tctttcttct 240

cgtagacttc aaacttatac ttgatgcctt tttcctcctg gacctcagag aggacgcctg 300

ggtattctgg gagaagttta tatttcccca aatcaatttc tgggaaaaac gtgtcacttt 360

caaattcctg catgatcctt gtcacaaaga gtctgaggtg gcctggttga ttcatggctt 420

cctggtaaac agaactgcct ccgactatcc aaaccatgtc tactttactt gccaattccg 480

gttgttcaat aagtcttaag gcatcatcca aacttttggc aagaaaatga gctcctcgtg 540

gtggttcttt gagttctcta ctgagaacta tattaattct gtcctttaaa ggtcgattct 600

tctcaggaat ggagaaccag gttttcctac ccataatcac cagattctgt ttaccttcca 660

ctgaagaggt tgtggtcatt ctttggaagt acttgaactc gttcctgagc ggaggccagg 720

gcaagtctcc gttcttgcca atccccatat tttgggacac ggcgacgatg cagttcaatg 780

gtcgaaccat ggtggcggac gaaaggcccg gagatgagga agaggagaac agcgcggcag 840

acgtgcgctt ttgaagcgtg cagaatgccg ggcctccgga ggaccttcgg gcgcccgccc 900

cgcccctgag cccgcccctg agcccgcccc cggacccacc ccttcccagc ctctgagccc 960

agaaagcgaa ggagcaaagc tgctattggc cgctgcccca aaggcctacc cgcttccatt 1020

gctcagcggt gctgtccatc tgcacgagac tagtgagtcg tgctacttcc atttgtcacg 1080

tcctgcacga cgcgagctgc ggggcggggg ggaacttcct gactagggga ggagtagaag 1140

gtggcgcgaa ggggccacca aagaacggag ccggttggcg cctaccggtg gatgtggaat 1200

gtgtgcgagg ccagaggcca cttgtgtagc gccaagtgcc cagcggggct gctaaagcgc 1260

atgctccaga ctgccttggg aaaagcgcct cccctacccg gtagagaaac ttgatctgtc 1320

gccgcaattc aaacttcgtg aggctccggt gcccgtcagt gacctgctat a 1371

<210> 150
<211> 977
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 150
aagtcttctt aattaatccc gcccctaact ccgcccagtt ccgcccattc tccgccccat 60

ggctgactaa ttttttttat ttatgcagag gccgaggccg cctcggcctc tgagctattc 120

cagaagtagt gaggaggctt ttttggaggt ataggctttt gcaaaatggt tcgaccattg 180

aactgcatcg tcgccgtgtc ccaaaatatg gggattggca agaacggaga tcttccctgg 240

cctccgctca ggaacgagtt caagtacttc caaagaatga ccacaacctc ttcagtggaa 300

ggtaaacaga atctggtgat tatgggtagg aaaacctggt tctccattcc tgagaagaat 360

cgacctttaa aggacagaat taatatagtt ctcagtagag aactcaaaga accaccacga 420

ggagctcatt ttcttgccaa aagtttggat gatgccttaa gacttattga acaaccggaa 480

ttggcaagta aagtagacat ggtttggata gtcggaggca gttctgttta ccaggaagcc 540

atgaatcaac caggccacct cagactcttt gtgacaagga tcatgcagga atttgaaagt 600

gacacgtttt tcccagaaat tgatttgggg aaatataaac ttctcccaga atacccaggc 660

gtcctctctg aggtccagga ggaaaaaggc atcaagtata agtttgaagt ctacgagaag 720

aaagactaat ggatccgctc agacatgata agatacattg atgagtttgg acaaaccaca 780

actagaatgc agtgaaaaaa atgctttatt tgtgaaattt gtgatgctat tgctttattt 840

gtaaccatta taagctgcaa taaacaagtt aacaacaaca attgcattca ttttatgttt 900

caggttcagg gggaggtgtg ggaggttttt taaagcaagt aaaacctcta caaatgtggt 960

aggcgcgccg aagacaa 977

<210> 151
<211> 1796
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 151
ttgtcttccc cacttctatg atccgcggcc gcatgcatct caattagtca gcaaccatag 60

tcccgcccct aactccgccc atcccgcccc taactccgcc cagttccgcc cattctccgc 120

cccatggctg actaattttt tttatttatg cagaggccga ggccgcctcg gcctctgagc 180

tattccagaa gtagtgagga ggctttttg gaggcctagg cttttgcaaa aagcttggac 240

acaagacagg cttgcgagat atgtttgaga ataccacttt atcccgcgtc agggagaggc 300

agtgcgtaaa aagacgcgga ctcatgtgaa atactggttt ttagtgcgcc agatctctat 360

aatctcgcgc aacctatttt cccctcgaac acttttaag ccgtagataa acaggctggg 420

acacttcaca tggttcgacc attgaactgc atcgtcgccg tgtcccaaaa tatggggatt 480

ggcaagaacg gagatcttcc ctggcctccg ctcaggaacg agttcaagta cttccaaaga 540

atgaccacaa cctcttcagt ggaaggtaaa cagaatctgg tgattatggg taggaaaacc 600

tggttctcca ttcctgagaa gaatcgacct ttaaaggaca gaattaatat agttctcagt 660

agagaactca aagaaccacc acgaggagct cattttcttg ccaaaagttt ggatgatgcc 720

ttaagactta ttgaacaacc ggaattggca agtaaagtag acatggtttg gatagtcgga 780

ggcagttctg tttaccagga agccatgaat caaccaggcc acctcagact ctttgtgaca 840

aggatcatgc aggaatttga aagtgacacg tttttcccag aaattgattt ggggaaatat 900

aaacttctcc cagaataccc aggcgtcctc tctgaggtcc aggaggaaaa aggcatcaag 960

tataagtttg aagtctacga gaagaaagac taaataatca gccataccac atttgtagag 1020

gttttacttg ctttaaaaaa cctcccacac ctccccctga acctgaaaca taaaatgaat 1080

gcaattgttg ttgttaactt gtttattgca gcttataatg gttacaaata aagcaatagc 1140

atcacaaatt tcacaaataa agcatttttt tcactgcatt ctagttgtgg tttgtccaaa 1200

ctcatcaatg tatcttatca tgtctggatc ctgcctcgcg cgtttcggtg atgacggtga 1260

aaacctcaaa tcgataatat atggtagggt tcatagccag agtaaccttt ttttttaatt 1320

tttattttat tttatttttg agtcgggcgc gccaaaatga agtgaagttc ctatactttc 1380

tagatagact ctgggtagaa tgttctgttt cctgtaatat aaaatcataa agtgatgata 1440

ttatcaagtg aaaaggaaat gtggtacctt aatctttcca catcaagcca atatcatgct 1500

gaaggccaga gaatcttttt tgctaaaaaa cacaatacag atataattaa tagttatcat 1560

ttatgtttga tattaatcat atgaatataa ttaatatgtt ttattgtatc gattattgtt 1620

gatattaatg taattactac taatacataa caaatataac taatggttat ggctcagtaa 1680

ctaaggtaag atataagcta cactggtaaa gaaagatcaa tattgcttca gagtacactg 1740

aagtaaatga ataacttaac cggtctaggt tgtcacttat atttatacga agactt 1796

<210> 152
<211> 1819
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 152
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca ctttatggcc 420

acctcagcaa gttcccactt gaacaaaaac atcaagcaaa tgtacttgtg cctgccccag 480

ggtgagaaag tccaagccat gtatatctgg gttgatggta ctggagaagg actgcgctgc 540

aaaacccgca ccctggactg tgagcccaag tgtgtagaag agttacctga gtggaatttt 600

gatggctcta gtacctttca gtctgagggc tccaacagtg acatgtatct cagccctgtt 660

gccatgtttc gggacccctt ccgcagagat cccaacaagc tggtgttctg tgaagttttc 720

aagtacaacc ggaagcctgc agagactaat ttaaggcact cgtgtaaacg gataatggac 780

atggtgagca accagcaccc ctggtttgga atggaacagg agtatactct gatgggaaca 840

gatgggcacc cttttggttg gccttccaat ggctttcctg ggccccaagg tccgtattac 900

tgtggtgtgg gcgcagacaa agcctatggc agggatatcg tggaggctca ctaccgcgcc 960

tgcttgtatg ctggggtcaa gattacagga acaaatgctg aggtcatgcc tgcccagtgg 1020

gagttccaaa taggaccctg tgaaggaatc cgcatgggag atcatctctg ggtggcccgt 1080

ttcatcttgc atcgagtatg tgaggacttt ggggtaatag caacctttga ccccaagccc 1140

attcctggga actggaatgg tgcaggctgc cataccaact ttagcaccaa ggccatgcgg 1200

gaggagaatg gtctgaagca catcgaggag gccatcgaga aactaagcaa gcggcaccgg 1260

taccacattc gagcctacga tcccaagggg ggcctggaca atgcccgtcg tctgactggg 1320

ttccacgaaa cgtccaacat caacgacttt tctgctggtg tcgccaatcg cagtgccagc 1380

atccgcattc cccggactgt cggccaggag aagaaaggtt actttgaaga tcgccgcccc 1440

tctgccaatt gtgacccctt tgcagtgaca gaagccatcg tccgcacatg ccttctcaat 1500

gagactggcg acgagccctt ccaatacaaa aactggatta gaagcgatat gatcagatat 1560

atcgacgaat tcggtcagac cactacacgg atgcaatgac tcgctttctt gctgtccaat 1620

ttctattaaa ggttcctttg ttccctaagt ccaactacta aactgggggga tattatgaag 1680

ggccttgagc atctggattc tgcctaataa aaaacattta ttttcattgc aatgatgtat 1740

ttaaattatt tctgaatatt ttactaaaaa gggaatgtgg gaggtcagtg catttaaaac 1800

ataaagaaaa agaagacac 1819

<210> 153
<211> 2336
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 153
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg acacaagaca 120

ggcttgcgag atatgtttga gaataccact ttatcccgcg tcagggagag gcagtgcgta 180

aaaagacgcg gactcatgtg aaatactggt ttttagtgcg ccagatctct ataatctcgc 240

gcaacctatt ttcccctcga acacttttta agccgtagat aaacaggctg ggacacttca 300

catggccacc tcagcaagtt cccacttgaa caaaaacatc aagcaaatgt acttgtgcct 360

gccccagggt gagaaagtcc aagccatgta tatctgggtt gatggtactg gagaaggact 420

gcgctgcaaa acccgcaccc tggactgtga gcccaagtgt gtagaagagt tacctgagtg 480

gaattttgat ggctctagta cctttcagtc tgagggctcc aacagtgaca tgtatctcag 540

ccctgttgcc atgtttcggg acccccttccg cagagatccc aacaagctgg tgttctgtga 600

agttttcaag tacaaccgga agcctgcaga gactaattta aggcactcgt gtaaacggat 660

aatggacatg gtgagcaacc agcacccctg gtttggaatg gaacaggagt atactctgat 720

gggaacagat gggcaccctt ttggttggcc ttccaatggc tttcctgggc cccaaggtcc 780

gtattactgt ggtgtgggcg cagacaaagc ctatggcagg gatatcgtgg aggctcacta 840

ccgcgcctgc ttgtatgctg gggtcaagat tacaggaaca aatgctgagg tcatgcctgc 900

ccagtgggag ttccaaatag gaccctgtga aggaatccgc atgggagatc atctctgggt 960

ggcccgtttc atcttgcatc gagtatgtga ggactttggg gtaatagcaa cctttgaccc 1020

caagcccatt cctgggaact ggaatggtgc aggctgccat accaacttta gcaccaaggc 1080

catgcgggag gagaatggtc tgaagcacat cgaggaggcc atcgagaaac taagcaagcg 1140

gcaccggtac cacattcgag cctacgatcc caaggggggc ctggacaatg cccgtcgtct 1200

gactgggttc cacgaaacgt ccaacatcaa cgacttttct gctggtgtcg ccaatcgcag 1260

tgccagcatc cgcattcccc ggactgtcgg ccaggagaag aaaggttact ttgaagatcg 1320

ccgcccctct gccaattgtg acccctttgc agtgacagaa gccatcgtcc gcacatgcct 1380

tctcaatgag actggcgacg agcccttcca atacaaaaac taataattag actttgagtg 1440

atcttgagcc tttcctagtt catcccaccc cgccccagag agatctttgt gaaggaacct 1500

tacttctgtg gtgtgacata attggacaaa ctacctacag agatttaaag ctctaaggta 1560

aatataaaat ttttaagtgt ataatgtgtt aaactactga ttctaattgt ttgtgtattt 1620

tagattccaa cctatggaac tgatgaatgg gagcagtggt ggaatgcctt taatgaggaa 1680

aacctgtttt gctcagaaga aatgccatct agtgatgatg aggctactgc tgactctcaa 1740

cattctactc ctccaaaaaa gaagagaaag gtagaagatc ccaaggactt tccttcagaa 1800

ttgctaagtt ttttgagtca tgctgtgttt agtaatagaa ctcttgcttg ctttgctatt 1860

tacaccacaa aggaaaaagc tgcactgcta tacaagaaaa ttatggaaaa atattctgta 1920

acctttataa gtaggcataa cagttataat cataacatac tgtttttttct tactccacac 1980

aggcatagag tgtctgctat taataactat gctcaaaaat tgtgtacctt tagctttta 2040

atttgtaaag gggttaataa ggaatatttg atgtatagtg ccttgactag agatcataat 2100

cagccatacc acatttgtag aggttttact tgctttaaaa aacctcccac acctcccct 2160

gaacctgaaa cataaaatga atgcaattgt tgttgttaac ttgtttattg cagcttataa 2220

tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt tttcactgca 2280

ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgga agacac 2336

<210> 154
<211> 2571
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 154
atgtcttcca ctgacgggca ccggagcctc acgaagtttg aattgcggcg acagatcaag 60

tttcctcttt aattaagctg tggaatgtgt gtcagttagg gtgtggaaag tccccaggct 120

ccccagcagg cagaagtatg caaagcatgc atctcaatta gtcagcaacc aggtgtggaa 180

agtccccagg ctccccagca ggcagaagta tgcaaagcat gcatctcaat tagtcagcaa 240

ccatagtccc gcccctaact ccgcccatcc cgcccctaac tccgcccagt tccgcccatt 300

ctccgcccca tggctgacta attttttta tttatgcaga ggccgaggcc gcctcggcct 360

ctgagctatt ccagaagtag tgaggaggct tttttggagg cctaggcttt tgcaaaaagc 420

tagcttgggg ccaccgctca gagcaccttc caccatggcc acctcagcaa gttcccactt 480

gaacaaaaac atcaagcaaa tgtacttgtg cctgccccag ggtgagaaag tccaagccat 540

gtatatctgg gttgatggta ctggagaagg actgcgctgc aaaacccgca ccctggactg 600

tgagcccaag tgtgtagaag agttacctga gtggaatttt gatggctcta gtacctttca 660

gtctgagggc tccaacagtg acatgtatct cagccctgtt gccatgtttc gggacccctt 720

ccgcagagat cccaacaagc tggtgttctg tgaagttttc aagtacaacc ggaagcctgc 780

agagactaat ttaaggcact cgtgtaaacg gataatggac atggtgagca accagcaccc 840

ctggtttgga atggaacagg agtatactct gatgggaaca gatgggcacc cttttggttg 900

gccttccaat ggctttcctg ggccccaagg tccgtattac tgtggtgtgg gcgcagacaa 960

agcctatggc agggatatcg tggaggctca ctaccgcgcc tgcttgtatg ctggggtcaa 1020

gattacagga acaaatgctg aggtcatgcc tgcccagtgg gagttccaaa taggaccctg 1080

tgaaggaatc cgcatgggag atcatctctg ggtggcccgt ttcatcttgc atcgagtatg 1140

tgaggacttt ggggtaatag caacctttga ccccaagccc attcctggga actggaatgg 1200

tgcaggctgc cataccaact ttagcaccaa ggccatgcgg gaggagaatg gtctgaagca 1260

catcgaggag gccatcgaga aactaagcaa gcggcaccgg taccacattc gagcctacga 1320

tcccaagggg ggcctggaca atgcccgtcg tctgactggg ttccacgaaa cgtccaacat 1380

caacgacttt tctgctggtg tcgccaatcg cagtgccagc atccgcattc cccggactgt 1440

cggccaggag aagaaaggtt actttgaaga tcgccgcccc tctgccaatt gtgacccctt 1500

tgcagtgaca gaagccatcg tccgcacatg ccttctcaat gagactggcg acgagccctt 1560

ccaatacaaa aactaattag actttgagtg atcttgagcc tttcctagtt catcccaccc 1620

cgccccagag agatctttgt gaaggaacct tacttctgtg gtgtgacata attggacaaa 1680

ctacctacag agatttaaag ctctaaggta aatataaaat ttttaagtgt ataatgtgtt 1740

aaactactga ttctaattgt ttgtgtattt tagattccaa cctatggaac tgatgaatgg 1800

gagcagtggt ggaatgcctt taatgaggaa aacctgtttt gctcagaaga aatgccatct 1860

agtgatgatg aggctactgc tgactctcaa cattctactc ctccaaaaaa gaagagaaag 1920

gtagaagatc ccaaggactt tccttcagaa ttgctaagtt ttttgagtca tgctgtgttt 1980

agtaatagaa ctcttgcttg ctttgctatt tacaccacaa aggaaaaagc tgcactgcta 2040

tacaagaaaa ttatggaaaa atattctgta acctttataa gtaggcataa cagttataat 2100

cataacatac tgtttttttct tactccacac aggcatagag tgtctgctat taataactat 2160

gctcaaaaat tgtgtacctt tagcttttta atttgtaaag gggttaataa ggaatatttg 2220

atgtatagtg ccttgactag agatcataat cagccatacc acatttgtag aggttttact 2280

tgctttaaaa aacctcccac acctcccccct gaacctgaaa cataaaatga atgcaattgt 2340

tgttgttaac ttgtttattg cagcttataa tggttacaaa taaagcaata gcatcacaaa 2400

tttcacaaat aaagcatttt tttcactgca ttctagttgt ggtttgtcca aactcatcaa 2460

tgtatcttat catgtctgga tctagcttcg tgtcaaggac ggtgactgca gtgaataata 2520

aaatgtgtgt ttgtccgaaa tacgcgtttt gagatttctc gaggaagaca t 2571

<210> 155
<211> 2571
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 155
atgtcttcct cgagaaatct caaaacgcgt atttcggaca aacacacatt ttattattca 60

ctgcagtcac cgtccttgac acgaagctag atccagacat gataagatac attgatgagt 120

ttggacaaac cacaactaga atgcagtgaa aaaaatgctt tatttgtgaa atttgtgatg 180

ctattgcttt atttgtaacc attataagct gcaataaaca agttaacaac aacaattgca 240

ttcattttat gtttcaggtt caggggggagg tgtgggaggt tttttaaagc aagtaaaacc 300

tctacaaatg tggtatggct gattatgatc tctagtcaag gcactataca tcaaatattc 360

cttattaacc cctttacaaa ttaaaaagct aaaggtacac aatttttgag catagttatt 420

aatagcagac actctatgcc tgtgtggagt aagaaaaaac agtatgttat gattataact 480

gttatgccta cttataaagg ttacagaata tttttccata attttcttgt atagcagtgc 540

agctttttcc tttgtggtgt aaatagcaaa gcaagcaaga gttctattac taaacacagc 600

atgactcaaa aaacttagca attctgaagg aaagtccttg ggatcttcta cctttctctt 660

ctttttgga ggagtagaat gttgagagtc agcagtagcc tcatcatcac tagatggcat 720

ttcttctgag caaaacaggt tttcctcatt aaaggcattc caccactgct cccattcatc 780

agttccatag gttggaatct aaaatacaca aacaattaga atcagtagtt taacacatta 840

tacacttaaa aattttatat ttaccttaga gctttaaatc tctgtaggta gtttgtccaa 900

ttatgtcaca ccacagaagt aaggttcctt cacaaagatc tctctggggc ggggtgggat 960

gaactaggaa aggctcaaga tcactcaaag tctaattagt ttttgtattg gaagggctcg 1020

tcgccagtct cattgagaag gcatgtgcgg acgatggctt ctgtcactgc aaaggggtca 1080

caattggcag aggggcggcg atcttcaaag taacctttct tctcctggcc gacagtccgg 1140

ggaatgcgga tgctggcact gcgattggcg acaccagcag aaaagtcgtt gatgttggac 1200

gtttcgtgga acccagtcag acgacgggca ttgtccaggc ccccttggg atcgtaggct 1260

cgaatgtggt accggtgccg cttgcttagt ttctcgatgg cctcctcgat gtgcttcaga 1320

ccattctcct cccgcatggc cttggtgcta aagttggtat ggcagcctgc accattccag 1380

ttcccaggaa tgggcttggg gtcaaaggtt gctattaccc caaagtcctc acatactcga 1440

tgcaagatga aacgggccac ccagagatga tctcccatgc ggattccttc acagggtcct 1500

atttggaact cccactgggc aggcatgacc tcagcatttg ttcctgtaat cttgacccca 1560

gcatacaagc aggcgcggta gtgagcctcc acgatatccc tgccataggc tttgtctgcg 1620

cccacaccac agtaatacgg accttggggc ccaggaaagc cattggaagg ccaaccaaaa 1680

gggtgcccat ctgttcccat cagagtatac tcctgttcca ttccaaacca ggggtgctgg 1740

ttgctcacca tgtccattat ccgtttacac gagtgcctta aattagtctc tgcaggcttc 1800

cggttgtact tgaaaacttc acagaacacc agcttgttgg gatctctgcg gaaggggtcc 1860

cgaaacatgg caacagggct gagatacatg tcactgttgg agccctcaga ctgaaaggta 1920

ctagagccat caaaattcca ctcaggtaac tcttctacac acttgggctc acagtccagg 1980

gtgcgggttt tgcagcgcag tccttctcca gtaccatcaa cccagatata catggcttgg 2040

actttctcac cctggggcag gcacaagtac atttgcttga tgtttttgtt caagtgggaa 2100

cttgctgagg tggccatggt ggaaggtgct ctgagcggtg gccccaagct agctttttgc 2160

aaaagcctag gcctccaaaa aagcctcctc actacttctg gaatagctca gaggccgagg 2220

cggcctcggc ctctgcataa ataaaaaaaa ttagtcagcc atggggcgga gaatgggcgg 2280

aactgggcgg agttaggggc gggatgggcg gagttagggg cgggactatg gttgctgact 2340

aattgagatg catgctttgc atacttctgc ctgctgggga gcctggggac tttccacacc 2400

tggttgctga ctaattgaga tgcatgcttt gcatacttct gcctgctggg gagcctgggg 2460

actttccaca ccctaactga cacacattcc acagcttaat taaagaggaa acttgatctg 2520

tcgccgcaat tcaaacttcg tgaggctccg gtgcccgtca gtggaagaca t 2571

<210> 156
<211> 1765
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 156
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ctgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgcc gggagcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccacat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

cccacagacc tggtgaccgt caggaagaag attcagtgag aggacacgag gtatgtcatg 1500

gtttttaatc aataaataaa gaggttttat tcatcggaca gtcgttgtag cctgtaaaag 1560

actcgccccg gagggggttc ccccgatgtg aggggcatgc agtagtatgg tgtcctgagt 1620

gtctcggatg cgtccttgaa ctcgcactct accgccgtgg gggttaataa agttttgctg 1680

cgccggtagg gggggaggcc gaggataata aagttgctac gtactggttg aagtctaaca 1740

atctctcggg gggatccgaa gacac 1765

<210> 157
<211> 1659
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 157
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ctgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgcc gggagcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccacat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

cctcgctttc ttgctgtcca atttctatta aaggttcctt tgttccctaa gtccaactac 1500

taaactgggg gatattatga agggccttga gcatctggat tctgcctaat aaaaaacatt 1560

tattttcatt gcaatgatgt atttaaatta tttctgaata ttttactaaa aagggaatgt 1620

gggaggtcag tgcatttaaa acataaagaa agaagacac 1659

<210> 158
<211> 1765
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 158
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggcatcaa gcaaatgtac atgtccctgc cccagggtga 300

gaaaatccaa gccatgtata tctgggttga tggtaccgga gaaggactgc gctgcaagac 360

ccgtaccctg gactgtgacc ccaagtgtgt ggaagagtta cctgagtgga actttgatgg 420

ctctagtacc tttcagtctg aaggctccaa cagcgacatg tacctccatc ctgttgccat 480

gtttcgggac cccttccgca aagaccccaa caagctggtg ctatgtgaag ttttcaagta 540

taaccggaag cctgcagaaa ccaacttgag gcacatctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga gcaggaatat actcttatgg gaacagacgg 660

ccacccattt ggttggcctt ccaatggctt ccctggaccc caaggcccgt attactgcgg 720

tgtgggagca gacaaggcct acggcaggga catcgtggag gctcactacc gggcctgctt 780

gtatgctgga gtcaagatca cggggacaaa tgcggaggtt atgcctgccc agtgggaatt 840

ccagatagga ccctgtgagg gaatccgaat gggagatcat ctttggatag cccgttttat 900

cttgcatcgg gtgtgcgaag attttggggt gatagcaacc tttgacccca agcccattcc 960

agggaactgg aatggtgcag gctgccatac caacttcagc accaaggcca tgcgggagga 1020

gaatggtctg aagtgcattg aggaggccat tgacaaactg agcaagaggc accagtacca 1080

catccgcgcc tacgatccca agggggggcct ggacaacgcc cggcgtctga ctggattcca 1140

cgaaacctcc aacatcaacg acttttctgc cggtgttgcc aaccgctccg ccagtatccg 1200

cattccccgg actgtcggcc aggagaagaa gggctacttt gaggaccgtc ggccttctgc 1260

caattgtgac ccctatgcgg tgacagaagc catcgtccgc acgtgtctcc tcaacgaaac 1320

aggcgacgaa cccttccaat acaagaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

cccacagacc tggtgaccgt caggaagaag attcagtgag aggacacgag gtatgtcatg 1500

gtttttaatc aataaataaa gaggttttat tcatcggaca gtcgttgtag cctgtaaaag 1560

actcgccccg gagggggttc ccccgatgtg aggggcatgc agtagtatgg tgtcctgagt 1620

gtctcggatg cgtccttgaa ctcgcactct accgccgtgg gggttaataa agttttgctg 1680

cgccggtagg gggggaggcc gaggataata aagttgctac gtactggttg aagtctaaca 1740

atctctcggg gggatccgaa gacac 1765

<210> 159
<211> 1765
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 159
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggaatcaa gcaaatgtac atgaacctgc cccagggtga 300

gaaaatccaa ctgatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgacc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctccacc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagctcccag caccccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg atcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg cggtgcatcg aggaggccat cgacaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg atcgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctacgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

cccacagacc tggtgaccgt caggaagaag attcagtgag aggacacgag gtatgtcatg 1500

gtttttaatc aataaataaa gaggttttat tcatcggaca gtcgttgtag cctgtaaaag 1560

actcgccccg gagggggttc ccccgatgtg aggggcatgc agtagtatgg tgtcctgagt 1620

gtctcggatg cgtccttgaa ctcgcactct accgccgtgg gggttaataa agttttgctg 1680

cgccggtagg gggggaggcc gaggataata aagttgctac gtactggttg aagtctaaca 1740

atctctcggg gggatccgaa gacac 1765

<210> 160
<211> 1659

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 160
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggaatcaa gcaaatgtac atgaacctgc cccagggtga 300

gaaaatccaa ctgatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgacc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctccacc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagctcccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccтttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg atcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg cggtgcatcg aggaggccat cgacaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg atcgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctacgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

cctcgctttc ttgctgtcca atttctatta aaggttcctt tgttccctaa gtccaactac 1500

taaactgggg gatattatga agggccttga gcatctggat tctgcctaat aaaaaacatt 1560

tattttcatt gcaatgatgt atttaaatta tttctgaata ttttactaaa aagggaatgt 1620

gggaggtcag tgcatttaaa acataaagaa agaagacac 1659

<210> 161
<211> 1591
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 161
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ctgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgcc gggagcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccacat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaacta atggatccgc tcagacatga taagatacat 1380

tgatgagttt ggacaaacca caactagaat gcagtgaaaa aaatgcttta tttgtgaaat 1440

ttgtgatgct attgctttat ttgtaaccat tataagctgc aataaacaag ttaacaacaa 1500

caattgcatt cattttatgt ttcaggttca gggggaggtg tgggaggttt tttaaagcaa 1560

gtaaaacctc tacaaatgtg gtagaagaca c 1591

<210> 162
<211> 1591
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 162
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggcatcaa gcaaatgtac atgtccctgc cccagggtga 300

gaaaatccaa gccatgtata tctgggttga tggtaccgga gaaggactgc gctgcaagac 360

ccgtaccctg gactgtgacc ccaagtgtgt ggaagagtta cctgagtgga actttgatgg 420

ctctagtacc tttcagtctg aaggctccaa cagcgacatg tacctccatc ctgttgccat 480

gtttcgggac cccttccgca aagaccccaa caagctggtg ctatgtgaag ttttcaagta 540

taaccggaag cctgcagaaa ccaacttgag gcacatctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga gcaggaatat actcttatgg gaacagacgg 660

ccacccattt ggttggcctt ccaatggctt ccctggaccc caaggcccgt attactgcgg 720

tgtgggagca gacaaggcct acggcaggga catcgtggag gctcactacc gggcctgctt 780

gtatgctgga gtcaagatca cggggacaaa tgcggaggtt atgcctgccc agtgggaatt 840

ccagatagga ccctgtgagg gaatccgaat gggagatcat ctttggatag cccgttttat 900

cttgcatcgg gtgtgcgaag attttggggt gatagcaacc tttgacccca agcccattcc 960

agggaactgg aatggtgcag gctgccatac caacttcagc accaaggcca tgcgggagga 1020

gaatggtctg aagtgcattg aggaggccat tgacaaactg agcaagaggc accagtacca 1080

catccgcgcc tacgatccca agggggggcct ggacaacgcc cggcgtctga ctggattcca 1140

cgaaacctcc aacatcaacg acttttctgc cggtgttgcc aaccgctccg ccagtatccg 1200

cattccccgg actgtcggcc aggagaagaa gggctacttt gaggaccgtc ggccttctgc 1260

caattgtgac ccctatgcgg tgacagaagc catcgtccgc acgtgtctcc tcaacgaaac 1320

aggcgacgaa cccttccaat acaagaacta atggatccgc tcagacatga taagatacat 1380

tgatgagttt ggacaaacca caactagaat gcagtgaaaa aaatgcttta tttgtgaaat 1440

ttgtgatgct attgctttat ttgtaaccat tataagctgc aataaacaag ttaacaacaa 1500

caattgcatt cattttatgt ttcaggttca gggggaggtg tgggaggttt tttaaagcaa 1560

gtaaaacctc tacaaatgtg gtagaagaca c 1591

<210> 163
<211> 1591
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 163
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggaatcaa gcaaatgtac atgaacctgc cccagggtga 300

gaaaatccaa ctgatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgacc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctccacc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagctcccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg atcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg cggtgcatcg aggaggccat cgacaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg atcgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctacgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaacta atggatccgc tcagacatga taagatacat 1380

tgatgagttt ggacaaacca caactagaat gcagtgaaaa aaatgcttta tttgtgaaat 1440

ttgtgatgct attgctttat ttgtaaccat tataagctgc aataaacaag ttaacaacaa 1500

caattgcatt cattttatgt ttcaggttca gggggaggtg tgggaggttt tttaaagcaa 1560

gtaaaacctc tacaaatgtg gtagaagaca c 1591

<210> 164
<211> 1778
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 164
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

ttagtttttg tattggaagg gctcgtcgcc agtctcattg agaaggcatg tgcggacgat 300

ggcttctgtc actgcaaagg ggtcacaatt ggcagagggg cggcgatctt caaagtaacc 360

tttcttctcc tggccgacag tccggggaat gcggatgctg gcactgcgat tggcgacacc 420

agcagaaaag tcgttgatgt tggacgtttc gtggaaccca gtcagacgac gggcattgtc 480

caggcccccc ttgggatcgt aggctcgaat gtggtacctg tgccgcttgc ttagtttctc 540

gatggcctcc tcgatgtgct tcagaccatt ctcctcccgc atggccttgg tgctaaagtt 600

ggtatggcag cctgcaccat tccagttccc aggaatgggc ttggggtcaa aggttgctat 660

taccccaaag tcctcacata ctcgatgcaa gatgaaacgg gccacccaga gatgatctcc 720

catgcggatt ccttcacagg gtcctatttg gaactcccac tgggcaggca tgacctcagc 780

atttgttcct gtaatcttga ccccagcata caagcaggcg cggtagtgag cctccacgat 840

atccctgcca taggctttgt ctgcgcccac accacagtaa tacggacctt ggggcccagg 900

aaagccattg gaaggccaac caaaagggtg cccatctgtt cccatcagag tatactcctg 960

ttccattcca aaccaggggt gctggttgct caccatgtcc attatccgtt tacacgagtg 1020

ccttaaattt gtctctgcag gcttccggtt gtacttgaaa acttcacaga acaccagctt 1080

gttgggatct ctgcggaagg ggtcccgaaa catggcaaca gggctgagat acatgtcact 1140

gttggagccc tcagactgaa aggtactaga gccatcaaaa ttccactcag gtaactcttc 1200

tacacacttg ggctcacagt ccagggtgcg ggttttgcag cgcagtcctt ctccagtacc 1260

atcaacccag atatacatgg cttggacttt ctcaccctgg ggcaggcaca agtacatttg 1320

cttgatgttt ttgttcaagt gggaacttgc tgaggtggcc atgtgaagtg tcccagcctg 1380

tttatctacg gcttaaaaag tgttcgaggg gaaaataggt tgcgcgagat tatagagatc 1440

tggcgcacta aaaaccagta tttcacatga gtccgcgtct ttttacgcac tgcctctccc 1500

tgacgcggga taaagtggta ttctcaaaca tatctcgcaa gcctgtcttg tgtccctgca 1560

gagtcgctct gtgttcgagg ccacacgcgt caccttaata tgcgaagtgg acctgggacc 1620

gcgccgcccc gactgcatct gcgtgttttc gccaatgaca agacgctggg cggggtttgt 1680

gtcatcatag aactaaagac atgcaaatat atttcttccg gggacaccgc cagcaaacgc 1740

gagcaacggg ccacggggat gaagcagctg gaagacta 1778

<210> 165
<211> 1721
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 165
ttgtcttcgg cgcgcccagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

gccacctcag caagttccca cttgaacaaa aacatcaagc aaatgtactt gtgcctgccc 300

cagggtgaga aagtccaagc catgtatatc tgggttgatg gtactggaga aggactgcgc 360

tgcaaaaccc gcaccctgga ctgtgagccc aagtgtgtag aagagttacc tgagtggaat 420

tttgatggct ctagtacctt tcagtctgag ggctccaaca gtgacatgta tctcagccct 480

gttgccatgt ttcgggaccc cttccgcaga gatcccaaca agctggtgtt ctgtgaagtt 540

ttcaagtaca accggaagcc tgcagagaca aatttaaggc actcgtgtaa acggataatg 600

gacatggtga gcaaccagca cccctggttt ggaatggaac aggagtatac tctgatggga 660

acagatgggc acccttttgg ttggccttcc aatggctttc ctgggcccca aggtccgtat 720

tactgtggtg tgggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc 780

gcctgcttgt atgctggggt caagattaca ggaacaaatg ctgaggtcat gcctgcccag 840

tgggagttcc aaataggacc ctgtgaagga atccgcatgg gagatcatct ctgggtggcc 900

cgtttcatct tgcatcgagt atgtgaggac tttggggtaa tagcaacctt tgaccccaag 960

cccattcctg ggaactggaa tggtgcaggc tgccatacca actttagcac caaggccatg 1020

cgggaggaga atggtctgaa gcacatcgag gaggccatcg agaaactaag caagcggcac 1080

aggtaccaca ttcgagccta cgatcccaag gggggcctgg acaatgcccg tcgtctgact 1140

gggttccacg aaacgtccaa catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc 1200

agcatccgca ttccccggac tgtcggccag gagaagaaag gttactttga agatcgccgc 1260

ccctctgcca attgtgaccc ctttgcagtg acagaagcca tcgtccgcac atgccttctc 1320

aatgagactg gcgacgagcc cttccaatac aaaaactgga tccgctcaga catgataaga 1380

tacattgatg agtttggaca aaccacaact agaatgcagt gaaaaaaatg ctttatttgt 1440

gaaatttgtg atgctattgc tttatttgta accattataa gctgcaataa acaagttaac 1500

aacaacaatt gcattcattt tatgtttcag gttcaggggg aggtgtggga ggtttttaa 1560

agcaagtaaa acctctacaa atgtggtaaa atcgataata tatggtaggg ttcatagcca 1620

gagtaacctt ttttttaat ttttatttta ttttattttt gagtcgggcg cgcaaaaatg 1680

aagtgaagtt cctatacttt ctagattaat taagaagact t 1721

<210> 166
<211> 2261
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 166
ttgtcttcgg cgcgcctacc acatttgtaa ggttttactt gctttaaaaa acctcccaca 60

cctccccctg aacctgaaac ataaaatgaa tgcaattgtt gttgttaact tgtttattgc 120

agcttataat ggttacaaat aaagcaatag catcacaaat ttcacaaata aagcattttt 180

ttcactgcat tctagttgtg gtttgtccaa actcatcaat gtatcttatc atgtctgagc 240

ggatccagtt tttgtattgg aagggctcgt cgccagtctc attgagaagg catgtgcgga 300

cgatggcttc tgtcactgca aaggggtcac aattggcaga ggggcggcga tcttcaaagt 360

aacctttctt ctcctggccg acagtccggg gaatgcggat gctggcactg cgattggcga 420

caccagcaga aaagtcgttg atgttggacg tttcgtggaa cccagtcaga cgacgggcat 480

tgtccaggcc ccccttggga tcgtaggctc gaatgtggta cctgtgccgc ttgcttagtt 540

tctcgatggc ctcctcgatg tgcttcagac cattctcctc ccgcatggcc ttggtgctaa 600

agttggtatg gcagcctgca ccattccagt tcccaggaat gggcttgggg tcaaaggttg 660

ctattacccc aaagtcctca catactcgat gcaagatgaa acgggccacc cagagatgat 720

ctcccatgcg gattccttca cagggtccta tttggaactc ccactgggca ggcatgacct 780

cagcatttgt tcctgtaatc ttgaccccag catacaagca ggcgcggtag tgagcctcca 840

cgatatccct gccataggct ttgtctgcgc ccacaccaca gtaatacgga ccttggggcc 900

caggaaagcc attggaaggc caaccaaaag ggtgcccatc tgttcccatc agagtatact 960

cctgttccat tccaaaccag gggtgctggt tgctcaccat gtccattatc cgtttacacg 1020

agtgccttaa atttgtctct gcaggcttcc ggttgtactt gaaaacttca cagaacacca 1080

gcttgttggg atctctgcgg aaggggtccc gaaacatggc aacagggctg agatacatgt 1140

cactgttgga gccctcagac tgaaaggtac tagagccatc aaaattccac tcaggtaact 1200

cttctacaca cttgggctca cagtccaggg tgcgggtttt gcagcgcagt ccttctccag 1260

taccatcaac ccagatatac atggcttgga ctttctcacc ctggggcagg cacaagtaca 1320

tttgcttgat gtttttgttc aagtgggaac ttgctgaggt ggccatgcca ccctgcagag 1380

tcgctctgtg ttcgaggcca cacgcgtcac cttaatatgc gaagtggacc tgggaccgcg 1440

ccgccccgac tgcatctgcg tgttttcgcc aatgacaaga cgctgggcgg ggtttgtgtc 1500

atcatagaac taaagacatg caaatatatt tcttccgggg acaccgccag caaacgcgag 1560

caacgggcca cggggatgaa gcagctgtag actctgggta gaatgttctg tttcctgtaa 1620

tataaaatca taaagtgatg atattatcaa gtgaaaagga aatgtggtac cttaatcttt 1680

ccacatcaag ccaatatcat gctgaaggcc agagaatctt ttttgctaaa aaacacaata 1740

cagatataat taatagttat catttatgtt tgatattaat catatgaata taattaatat 1800

gttttattgt atcgattatt gttgatatta atgtaattac tactaataca taacaaatat 1860

aactaatggt tatggctcag taactaaggt aagatataag ctacactggt aaagaaagat 1920

caatattgct tcagagtaca ctgaagtaaa tgaataactt aaccggtcta ggttgtcact 1980

tatatttata cgaaacttga tctgtcgccg caattcaagc ttcgtgaggc tccggtgccc 2040

gtcagtgacc tgctatagaa acttgatctg tcgccgcaat tcaagcttcg tgaggctccg 2100

gtgcccgtca gtgacctgct atactctgaa atcgataata tatggtaggg ttcatagcca 2160

gagtaacctt ttttttaat ttttatttta ttttattttt gagtcgggcg cgcaaaaatg 2220

aagtgaagtt cctatacttt ctagattaat taagaagact t 2261

<210> 167
<211> 2192
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 167
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgccaccat ggttgagaat accactttat cccgcgtcag ggagaggcag tgcgtaaaaa 300

gacgcggaac catgtgaaat actggttttt agtgcgccag atctctataa tctcgcgcaa 360

cctattttcc cctcgaacac tttttaagcc gtagataaac aggctgggac acttcacatg 420

gccacctcag caagttccca cttgaacaaa aacatcaagc aaatgtacct gtgcctgccc 480

cagggtgaga aagtccaagc catgtatatc tgggttgatg gtactggaga aggactgcgc 540

tgcaaaaccc gcaccctgga ctgtgagccc aagtgtgtag aagagttacc tgagtggaat 600

tttgatggct ctagtacctt tcagtctgag ggctccaaca gtgacatgta tctcagccct 660

gttgccatgt ttcgggaccc cttccgccgg gagcccaaca agctggtgtt ctgtgaagtt 720

ttcaagtaca accggaagcc tgcagagaca aatttaaggc actcctgtaa acggataatg 780

gacatggtga gcaaccagca cccctggttt ggaatggaac aggagtatac tctgatggga 840

acagatgggc acccttttgg ttggccttcc aatggctttc ctgggcccca aggtccgtat 900

tactgtggtg tgggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc 960

gcctgcttgt atgctggggt caagattaca ggaacaaatg ctgaggtcat gcctgcccag 1020

tgggagttcc aaataggacc ctgtgaagga atccacatgg gagatcatct ctgggtggcc 1080

cgtttcatct tgcatcgagt atgtgaggac tttggggtaa tagcaacctt tgaccccaag 1140

cccattcctg ggaactggaa tggtgcaggc tgccatacca actttagcac caaggccatg 1200

cgggaggaga atggtctgaa gcacatcgag gaggccatcg agaaactaag caagcggcac 1260

cagtaccaca ttcgagccta cgatcccaag gggggcctgg acaatgcccg tcgtctgact 1320

gggttccacg aaacgtccaa catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc 1380

agcatccgca ttccccggac tgtcggccag gagaagaaag gttactttga agatcgccgc 1440

ccctctgcca attgtgaccc ctttgcagtg acagaagcca tcgtccgcac atgccttctc 1500

aatgagactg gcgacgagcc cttccaatac aaaaactaat aattagactt tgagtgatct 1560

tgagcctttc ctagttcatc ccaccccgcc ccagagagat ctttgtgaag gaaccttact 1620

tctgtggtgt gacataattg gacaaactac ctacagagat ttaaagctct aaggtaaata 1680

taaaattttt aagtgtataa tgtgttaaac tactgattct aattgtttgt gtattttaga 1740

ttccaaccta tggaactgat gaatgggagc agtggtggaa tgcctttaat gaggaaaacc 1800

tgttttgctc agaagaaatg ccatctagtg atgatgaggc tactgctgac tctcaacatt 1860

ctactcctcc acagacctgg tgaccgtcag gaagaagatt cagtgagagg acacgaggta 1920

tgtcatggtt tttaatcaat aaataaagag gttttattca tcggacagtc gttgtagcct 1980

gtaaaagact cgccccggag ggggttcccc cgatgtgagg ggcatgcagt agtatggtgt 2040

cctgagtgtc tcggatgcgt ccttgaactc gcactctacc gccgtggggg ttaataaagt 2100

tttgctgcgc cggtaggggg ggaggccgag gataataaag ttgctacgta ctggttgaag 2160

tctaacaatc tctcgggggg atccgaagac ac 2192

<210> 168
<211> 2255
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 168
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgccaccat ggttgagaat accactttat cccgcgtcag ggagaggcag tgcgtaaaaa 300

gacgcggaac catgtgaaat actggttttt agtgcgccag atctctataa tctcgcgcaa 360

cctattttcc cctcgaacac tttttaagcc gtagataaac aggctgggac acttcacatg 420

gccacctcag caagttccca cttgaacaaa aacatcaagc aaatgtacct gtgcctgccc 480

cagggtgaga aagtccaagc catgtatatc tgggttgatg gtactggaga aggactgcgc 540

tgcaaaaccc gcaccctgga ctgtgagccc aagtgtgtag aagagttacc tgagtggaat 600

tttgatggct ctagtacctt tcagtctgag ggctccaaca gtgacatgta tctcagccct 660

gttgccatgt ttcgggaccc cttccgccgg gagcccaaca agctggtgtt ctgtgaagtt 720

ttcaagtaca accggaagcc tgcagagaca aatttaaggc actcctgtaa acggataatg 780

gacatggtga gcaaccagca cccctggttt ggaatggaac aggagtatac tctgatggga 840

acagatgggc acccttttgg ttggccttcc aatggctttc ctgggcccca aggtccgtat 900

tactgtggtg tgggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc 960

gcctgcttgt atgctggggt caagattaca ggaacaaatg ctgaggtcat gcctgcccag 1020

tgggagttcc aaataggacc ctgtgaagga atccacatgg gagatcatct ctgggtggcc 1080

cgtttcatct tgcatcgagt atgtgaggac tttggggtaa tagcaacctt tgaccccaag 1140

cccattcctg ggaactggaa tggtgcaggc tgccatacca actttagcac caaggccatg 1200

cgggaggaga atggtctgaa gcacatcgag gaggccatcg agaaactaag caagcggcac 1260

cagtaccaca ttcgagccta cgatcccaag gggggcctgg acaatgcccg tcgtctgact 1320

gggttccacg aaacgtccaa catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc 1380

agcatccgca ttccccggac tgtcggccag gagaagaaag gttactttga agatcgccgc 1440

ccctctgcca attgtgaccc ctttgcagtg acagaagcca tcgtccgcac atgccttctc 1500

aatgagactg gcgacgagcc cttccaatac aaaaactgga tccgctcaga catgataaga 1560

tacattgatg agtttggaca aaccacaact agaatgcagt gataattaga ctttgagtga 1620

tcttgagcct ttcctagttc atcccacccc gccccagaga gatctttgtg aaggaacctt 1680

acttctgtgg tgtgacataa ttggacaaac tacctacaga gatttaaagc tctaaggtaa 1740

atataaaatt tttaagtgta taatgtgtta aactactgat tctaattgtt tgtgtatttt 1800

agattccaac ctatggaact gatgaatggg agcagtggtg gaatgccttt aatgaggaaa 1860

acctgttttg ctcagaagaa atgccatcta gtgatgatga ggctactgct gactctcaac 1920

attctactcc tccacagacc tggtgaccgt caggaagaag attcagtgag aggacacgag 1980

gtatgtcatg gtttttaatc aataaataaa gaggttttat tcatcggaca gtcgttgtag 2040

cctgtaaaag actcgccccg gagggggttc ccccgatgtg aggggcatgc agtagtatgg 2100

tgtcctgagt gtctcggatg cgtccttgaa ctcgcactct accgccgtgg gggttaataa 2160

agttttgctg cgccggtagg gggggaggcc gaggataata aagttgctac gtactggttg 2220

aagtctaaca atctctcggg gggatccgaa gacac 2255

<210> 169
<211> 2192
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 169
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgccaccat ggttgagaat accactttat cccgcgtcag ggagaggcag tgcgtaaaaa 300

gacgcggaac catgtgaaat actggttttt agtgcgccag atctctataa tctcgcgcaa 360

cctattttcc cctcgaacac tttttaagcc gtagataaac aggctgggac acttcacatg 420

gccacctcag caagttccca cttgaacaaa ggaatcaagc aaatgtacat gaacctgccc 480

cagggtgaga aaatccaact gatgtatatc tgggttgatg gtactggaga aggactgcgc 540

tgcaaaaccc gcaccctgga ctgtgacccc aagtgtgtag aagagttacc tgagtggaat 600

tttgatggct ctagtacctt tcagtctgag ggctccaaca gtgacatgta tctccaccct 660

gttgccatgt ttcgggaccc cttccgcaga gatcccaaca agctggtgtt ctgtgaagtt 720

ttcaagtaca accggaagcc tgcagagaca aatttaaggc actcgtgtaa acggataatg 780

gacatggtga gctcccagca cccctggttt ggaatggaac aggagtatac tctgatggga 840

acagatgggc acccttttgg ttggccttcc aatggctttc ctgggcccca aggtccgtat 900

tactgtggtg tgggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc 960

gcctgcttgt atgctgggat caagattaca ggaacaaatg ctgaggtcat gcctgcccag 1020

tgggagttcc aaataggacc ctgtgaagga atccgcatgg gagatcatct ctgggtggcc 1080

cgtttcatct tgcatcgagt atgtgaggac tttggggtaa tagcaacctt tgaccccaag 1140

cccattcctg ggaactggaa tggtgcaggc tgccatacca actttagcac caaggccatg 1200

cgggaggaga atggtctgcg gtgcatcgag gaggccatcg acaaactaag caagcggcac 1260

cagtaccaca ttcgagccta cgatcccaag gggggcctgg acaatgcccg tcgtctgact 1320

gggttccacg aaacgtccaa catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc 1380

agcatccgca ttccccggat cgtcggccag gagaagaaag gttactttga agatcgccgc 1440

ccctctgcca attgtgaccc ctacgcagtg acagaagcca tcgtccgcac atgccttctc 1500

aatgagactg gcgacgagcc cttccaatac aaaaactaat aattagactt tgagtgatct 1560

tgagcctttc ctagttcatc ccaccccgcc ccagagagat ctttgtgaag gaaccttact 1620

tctgtggtgt gacataattg gacaaactac ctacagagat ttaaagctct aaggtaaata 1680

taaaattttt aagtgtataa tgtgttaaac tactgattct aattgtttgt gtattttaga 1740

ttccaaccta tggaactgat gaatgggagc agtggtggaa tgcctttaat gaggaaaacc 1800

tgttttgctc agaagaaatg ccatctagtg atgatgaggc tactgctgac tctcaacatt 1860

ctactcctcc acagacctgg tgaccgtcag gaagaagatt cagtgagagg acacgaggta 1920

tgtcatggtt tttaatcaat aaataaagag gttttattca tcggacagtc gttgtagcct 1980

gtaaaagact cgccccggag ggggttcccc cgatgtgagg ggcatgcagt agtatggtgt 2040

cctgagtgtc tcggatgcgt ccttgaactc gcactctacc gccgtggggg ttaataaagt 2100

tttgctgcgc cggtaggggg ggaggccgag gataataaag ttgctacgta ctggttgaag 2160

tctaacaatc tctcgggggg atccgaagac ac 2192

<210> 170
<211> 2255
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 170
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgccaccat ggttgagaat accactttat cccgcgtcag ggagaggcag tgcgtaaaaa 300

gacgcggaac catgtgaaat actggttttt agtgcgccag atctctataa tctcgcgcaa 360

cctattttcc cctcgaacac tttttaagcc gtagataaac aggctgggac acttcacatg 420

gccacctcag caagttccca cttgaacaaa ggaatcaagc aaatgtacat gaacctgccc 480

cagggtgaga aaatccaact gatgtatatc tgggttgatg gtactggaga aggactgcgc 540

tgcaaaaccc gcaccctgga ctgtgacccc aagtgtgtag aagagttacc tgagtggaat 600

tttgatggct ctagtacctt tcagtctgag ggctccaaca gtgacatgta tctccaccct 660

gttgccatgt ttcgggaccc cttccgcaga gatcccaaca agctggtgtt ctgtgaagtt 720

ttcaagtaca accggaagcc tgcagagaca aatttaaggc actcgtgtaa acggataatg 780

gacatggtga gctcccagca cccctggttt ggaatggaac aggagtatac tctgatggga 840

acagatgggc acccttttgg ttggccttcc aatggctttc ctgggcccca aggtccgtat 900

tactgtggtg tgggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc 960

gcctgcttgt atgctgggat caagattaca ggaacaaatg ctgaggtcat gcctgcccag 1020

tgggagttcc aaataggacc ctgtgaagga atccgcatgg gagatcatct ctgggtggcc 1080

cgtttcatct tgcatcgagt atgtgaggac tttggggtaa tagcaacctt tgaccccaag 1140

cccattcctg ggaactggaa tggtgcaggc tgccatacca actttagcac caaggccatg 1200

cgggaggaga atggtctgcg gtgcatcgag gaggccatcg acaaactaag caagcggcac 1260

cagtaccaca ttcgagccta cgatcccaag gggggcctgg acaatgcccg tcgtctgact 1320

gggttccacg aaacgtccaa catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc 1380

agcatccgca ttccccggat cgtcggccag gagaagaaag gttactttga agatcgccgc 1440

ccctctgcca attgtgaccc ctacgcagtg acagaagcca tcgtccgcac atgccttctc 1500

aatgagactg gcgacgagcc cttccaatac aaaaactgga tccgctcaga catgataaga 1560

tacattgatg agtttggaca aaccacaact agaatgcagt gataattaga ctttgagtga 1620

tcttgagcct ttcctagttc atcccacccc gccccagaga gatctttgtg aaggaacctt 1680

acttctgtgg tgtgacataa ttggacaaac tacctacaga gatttaaagc tctaaggtaa 1740

atataaaatt tttaagtgta taatgtgtta aactactgat tctaattgtt tgtgtatttt 1800

agattccaac ctatggaact gatgaatggg agcagtggtg gaatgccttt aatgaggaaa 1860

acctgttttg ctcagaagaa atgccatcta gtgatgatga ggctactgct gactctcaac 1920

attctactcc tccacagacc tggtgaccgt caggaagaag attcagtgag aggacacgag 1980

gtatgtcatg gtttttaatc aataaataaa gaggttttat tcatcggaca gtcgttgtag 2040

cctgtaaaag actcgccccg gaggggttc ccccgatgtg aggggcatgc agtagtatgg 2100

tgtcctgagt gtctcggatg cgtccttgaa ctcgcactct accgccgtgg gggttaataa 2160

agttttgctg cgccggtagg gggggaggcc gaggataata aagttgctac gtactggttg 2220

aagtctaaca atctctcggg gggatccgaa gacac 2255

<210> 171
<211> 1591
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 171
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

ttagtttttg tattggaagg gctcgtcgcc agtctcattg agaaggcatg tgcggacgat 300

ggcttctgtc actgcaaagg ggtcacaatt ggcagagggg cggcgatctt caaagtaacc 360

tttcttctcc tggccgacag tccggggaat gcggatgctg gcactgcgat tggcgacacc 420

agcagaaaag tcgttgatgt tggacgtttc gtggaaccca gtcagacgac gggcattgtc 480

caggcccccc ttgggatcgt aggctcgaat gtggtacctg tgccgcttgc ttagtttctc 540

gatggcctcc tcgatgtgct tcagaccatt ctcctcccgc atggccttgg tgctaaagtt 600

ggtatggcag cctgcaccat tccagttccc aggaatgggc ttggggtcaa aggttgctat 660

taccccaaag tcctcacata ctcgatgcaa gatgaaacgg gccacccaga gatgatctcc 720

catgcggatt ccttcacagg gtcctatttg gaactcccac tgggcaggca tgacctcagc 780

atttgttcct gtaatcttga ccccagcata caagcaggcg cggtagtgag cctccacgat 840

atccctgcca taggctttgt ctgcgcccac accacagtaa tacggacctt ggggcccagg 900

aaagccattg gaaggccaac caaaagggtg cccatctgtt cccatcagag tatactcctg 960

ttccattcca aaccaggggt gctggttgct caccatgtcc attatccgtt tacacgagtg 1020

ccttaaattt gtctctgcag gcttccggtt gtacttgaaa acttcacaga acaccagctt 1080

gttgggatct ctgcggaagg ggtcccgaaa catggcaaca gggctgagat acatgtcact 1140

gttggagccc tcagactgaa aggtactaga gccatcaaaa ttccactcag gtaactcttc 1200

tacacacttg ggctcacagt ccagggtgcg ggttttgcag cgcagtcctt ctccagtacc 1260

atcaacccag atatacatgg cttggacttt ctcaccctgg ggcaggcaca agtacatttg 1320

cttgatgttt ttgttcaagt gggaacttgc tgaggtggcc atgccaccct gcagagtcgc 1380

tctgtgttcg aggccacacg cgtcacctta atatgcgaag tggacctggg accgcgccgc 1440

cccgactgca tctgcgtgtt ttcgccaatg acaagacgct gggcggggtt tgtgtcatca 1500

tagaactaaa gacatgcaaa tatatttctt ccggggacac cgccagcaaa cgcgagcaac 1560

gggccacggg gatgaagcag ctggaagact a 1591

<210> 172
<211> 2264
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 172
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ctgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgcc gggagcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccтttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccacat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaacta ataattagac tttgagtgat cttgagcctt 1380

tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta cttctgtggt 1440

gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa tataaaattt 1500

ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta gattccaacc 1560

tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa cctgttttgc 1620

tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca ttctactcct 1680

ccaaaaaaga agagaaaggt agaagatccc aaggactttc cttcagaatt gctaagtttt 1740

ttgagtcatg ctgtgtttag taatagaact cttgcttgct ttgctattta caccacaaag 1800

gaaaaagctg cactgctata caagaaaatt atggaaaaat attctgtaac ctttataagt 1860

aggcataaca gttataatca taacatactg ttttttctta ctccacacag gcatagagtg 1920

tctgctatta ataactatgc tcaaaaattg tgtaccttta gctttttaat ttgtaaaggg 1980

gttaataagg aatatttgat gtatagtgcc ttgactagag atcataatca gccataccac 2040

atttgtagag gttttacttg ctttaaaaaa cctcccacac ctccccctga acctgaaaca 2100

taaaatgaat gcaattgttg ttgttaactt gtttattgca gcttataatg gttacaaata 2160

aagcaatagc atcacaaatt tcacaaataa agcatttttt tcactgcatt ctagttgtgg 2220

tttgtccaaa ctcatcaatg tatcttatca tgtctggaag acac 2264

<210> 173
<211> 2264
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 173
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ttgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc acaggtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtggactga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaacta ataattagac tttgagtgat cttgagcctt 1380

tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta cttctgtggt 1440

gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa tataaaattt 1500

ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta gattccaacc 1560

tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa cctgttttgc 1620

tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca ttctactcct 1680

ccaaaaaaga agagaaaggt agaagatccc aaggactttc cttcagaatt gctaagtttt 1740

ttgagtcatg ctgtgtttag taatagaact cttgcttgct ttgctattta caccacaaag 1800

gaaaaagctg cactgctata caagaaaatt atggaaaaat attctgtaac ctttataagt 1860

aggcataaca gttataatca taacatactg ttttttctta ctccacacag gcatagagtg 1920

tctgctatta ataactatgc tcaaaaattg tgtaccttta gctttttaat ttgtaaaggg 1980

gttaataagg aatatttgat gtatagtgcc ttgactagag atcataatca gccataccac 2040

atttgtagag gttttacttg ctttaaaaaa cctcccacac ctccccctga acctgaaaca 2100

taaaatgaat gcaattgttg ttgttaactt gtttattgca gcttataatg gttacaaata 2160

aagcaatagc atcacaaatt tcacaaataa agcatttttt tcactgcatt ctagttgtgg 2220

tttgtccaaa ctcatcaatg tatcttatca tgtctggaag acac 2264

<210> 174
<211> 2264
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 174
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggaatcaa gcaaatgtac atgaacctgc cccagggtga 300

gaaaatccaa ctgatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgacc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctccacc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagctcccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg atcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg cggtgcatcg aggaggccat cgacaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg atcgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctacgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaacta ataattagac tttgagtgat cttgagcctt 1380

tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta cttctgtggt 1440

gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa tataaaattt 1500

ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta gattccaacc 1560

tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa cctgttttgc 1620

tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca ttctactcct 1680

ccaaaaaaga agagaaaggt agaagatccc aaggactttc cttcagaatt gctaagtttt 1740

ttgagtcatg ctgtgtttag taatagaact cttgcttgct ttgctattta caccacaaag 1800

gaaaaagctg cactgctata caagaaaatt atggaaaaat attctgtaac ctttataagt 1860

aggcataaca gttataatca taacatactg ttttttctta ctccacacag gcatagagtg 1920

tctgctatta ataactatgc tcaaaaattg tgtaccttta gctttttaat ttgtaaaggg 1980

gttaataagg aatatttgat gtatagtgcc ttgactagag atcataatca gccataccac 2040

atttgtagag gttttacttg ctttaaaaaa cctcccacac ctccccctga acctgaaaca 2100

taaaatgaat gcaattgttg ttgttaactt gtttattgca gcttataatg gttacaaata 2160

aagcaatagc atcacaaatt tcacaaataa agcatttttt tcactgcatt ctagttgtgg 2220

tttgtccaaa ctcatcaatg tatcttatca tgtctggaag acac 2264

<210> 175
<211> 2264
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 175
gtgtcttcca gacatgataa gatacattga tgagtttgga caaaccacaa ctagaatgca 60

gtgaaaaaaa tgctttattt gtgaaatttg tgatgctatt gctttatttg taaccattat 120

aagctgcaat aaacaagtta acaacaacaa ttgcattcat tttatgtttc aggttcaggg 180

ggaggtgtgg gaggtttttt aaagcaagta aaacctctac aaatgtggta tggctgatta 240

tgatctctag tcaaggcact atacatcaaa tattccttat taaccccttt acaaattaaa 300

aagctaaagg tacacaattt ttgagcatag ttattaatag cagacactct atgcctgtgt 360

ggagtaagaa aaaacagtat gttatgatta taactgttat gcctacttat aaaggttaca 420

gaatattttt ccataatttt cttgtatagc agtgcagctt tttcctttgt ggtgtaaata 480

gcaaagcaag caagagttct attactaaac acagcatgac tcaaaaaact tagcaattct 540

gaaggaaagt ccttgggatc ttctaccttt ctcttctttt ttggaggagt agaatgttga 600

gagtcagcag tagcctcatc atcactagat ggcatttctt ctgagcaaaa caggttttcc 660

tcattaaagg cattccacca ctgctcccat tcatcagttc cataggttgg aatctaaaat 720

acacaaacaa ttagaatcag tagtttaaca cattatacac ttaaaaattt tatatttacc 780

ttagagcttt aaatctctgt aggtagtttg tccaattatg tcacaccaca gaagtaaggt 840

tccttcacaa agatctctct ggggcggggt gggatgaact aggaaaggct caagatcact 900

caaagtctaa ttattagttt ttgtattgga agggctcgtc gccagtctca ttgagaaggc 960

atgtgcggac gatggcttct gtcactgcaa aggggtcaca attggcagag gggcggcgat 1020

cttcaaagta acctttcttc tcctggccga cagtccgggg aatgcggatg ctggcactgc 1080

gattggcgac accagcagaa aagtcgttga tgttggacgt ttcgtggaac ccagtcagac 1140

gacgggcatt gtccaggccc cccttgggat cgtaggctcg aatgtggtac ctgtgccgct 1200

tgcttagttt ctcgatggcc tcctcgatgt gcttcagacc attctcctcc cgcatggcct 1260

tggtgctaaa gttggtatgg cagcctgcac cattccagtt cccaggaatg ggcttggggt 1320

caaaggttgc tattacccca aagtcctcac atactcgatg caagatgaaa cgggccaccc 1380

agagatgatc tcccatgcgg attccttcac agggtcctat ttggaactcc cactgggcag 1440

gcatgacctc agcatttgtt cctgtaatct tgaccccagc atacaagcag gcgcggtagt 1500

gagcctccac gatatccctg ccataggctt tgtctgcgcc cacaccacag taatacggac 1560

cttggggccc aggaaagcca ttggaaggcc aaccaaaagg gtgcccatct gttcccatca 1620

gagtatactc ctgttccatt ccaaaccagg ggtgctggtt gctcaccatg tccattatcc 1680

gtttacacga gtgccttaaa tttgtctctg caggcttccg gttgtacttg aaaacttcac 1740

agaacaccag cttgttggga tctctgcgga aggggtcccg aaacatggca acagggctga 1800

gatacatgtc actgttggag ccctcagact gaaaggtact agagccatca aaattccact 1860

caggtaactc ttctacacac ttgggctcac agtccagggt gcgggttttg cagcgcagtc 1920

cttctccagt accatcaacc cagatataca tggcttggac tttctcaccc tggggcaggc 1980

acaagtacat ttgcttgatg tttttgttca agtgggaact tgctgaggtg gccatgccac 2040

cctgcagagt cgctctgtgt tcgaggccac acgcgtcacc ttaatatgcg aagtggacct 2100

gggaccgcgc cgccccgact gcatctgcgt gttttcgcca atgacaagac gctgggcggg 2160

gtttgtgtca tcatagaact aaagacatgc aaatatattt cttccgggga caccgccagc 2220

aaacgcgagc aacgggccac ggggatgaag cagctggaag acta 2264

<210> 176
<211> 2264
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 176
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggcatcaa gcaaatgtac atgtccctgc cccagggtga 300

gaaaatccaa gccatgtata tctgggttga tggtaccgga gaaggactgc gctgcaagac 360

ccgtaccctg gactgtgacc ccaagtgtgt ggaagagtta cctgagtgga actttgatgg 420

ctctagtacc tttcagtctg aaggctccaa cagcgacatg tacctccatc ctgttgccat 480

gtttcgggac cccttccgca aagaccccaa caagctggtg ctatgtgaag ttttcaagta 540

taaccggaag cctgcagaaa ccaacttgag gcacatctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga gcaggaatat actcttatgg gaacagacgg 660

ccacccattt ggttggcctt ccaatggctt ccctggaccc caaggcccgt attactgcgg 720

tgtgggagca gacaaggcct acggcaggga catcgtggag gctcactacc gggcctgctt 780

gtatgctgga gtcaagatca cggggacaaa tgcggaggtt atgcctgccc agtgggaatt 840

ccagatagga ccctgtgagg gaatccgaat gggagatcat ctttggatag cccgttttat 900

cttgcatcgg gtgtgcgaag attttggggt gatagcaacc tttgacccca agcccattcc 960

agggaactgg aatggtgcag gctgccatac caacttcagc accaaggcca tgcgggagga 1020

gaatggtctg aagtgcattg aggaggccat tgacaaactg agcaagaggc accagtacca 1080

catccgcgcc tacgatccca agggggggcct ggacaacgcc cggcgtctga ctggattcca 1140

cgaaacctcc aacatcaacg acttttctgc cggtgttgcc aaccgctccg ccagtatccg 1200

cattccccgg actgtcggcc aggagaagaa gggctacttt gaggaccgtc ggccttctgc 1260

caattgtgac ccctatgcgg tgacagaagc catcgtccgc acgtgtctcc tcaacgaaac 1320

aggcgacgaa cccttccaat acaagaacta ataattagac tttgagtgat cttgagcctt 1380

tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta cttctgtggt 1440

gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa tataaaattt 1500

ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta gattccaacc 1560

tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa cctgttttgc 1620

tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca ttctactcct 1680

ccaaaaaaga agagaaaggt agaagatccc aaggactttc cttcagaatt gctaagtttt 1740

ttgagtcatg ctgtgtttag taatagaact cttgcttgct ttgctattta caccacaaag 1800

gaaaaagctg cactgctata caagaaaatt atggaaaaat attctgtaac ctttataagt 1860

aggcataaca gttataatca taacatactg ttttttctta ctccacacag gcatagagtg 1920

tctgctatta ataactatgc tcaaaaattg tgtaccttta gctttttaat ttgtaaaggg 1980

gttaataagg aatatttgat gtatagtgcc ttgactagag atcataatca gccataccac 2040

atttgtagag gttttacttg ctttaaaaaa cctcccacac ctccccctga acctgaaaca 2100

taaaatgaat gcaattgttg ttgttaactt gtttattgca gcttataatg gttacaaata 2160

aagcaatagc atcacaaatt tcacaaataa agcatttttt tcactgcatt ctagttgtgg 2220

tttgtccaaa ctcatcaatg tatcttatca tgtctggaag acac 2264

<210> 177
<211> 1588
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 177
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

gtttttgtat tggaagggct cgtcgccagt ctcattgaga aggcatgtgc ggacgatggc 300

ttctgtcact gcaaaggggt cacaattggc agaggggcgg cgatcttcaa agtaaccttt 360

cttctcctgg ccgacagtcc ggggaatgcg gatgctggca ctgcgattgg cgacaccagc 420

agaaaagtcg ttgatgttgg acgtttcgtg gaacccagtc agacgacggg cattgtccag 480

gccccccttg ggatcgtagg ctcgaatgtg gtacctgtgc cgcttgctta gtttctcgat 540

ggcctcctcg atgtgcttca gaccattctc ctcccgcatg gccttggtgc taaagttggt 600

atggcagcct gcaccattcc agttcccagg aatgggcttg gggtcaaagg ttgctattac 660

cccaaagtcc tcacatactc gatgcaagat gaaacgggcc acccagagat gatctcccat 720

gcggattcct tcacagggtc ctatttggaa ctcccactgg gcaggcatga cctcagcatt 780

tgttcctgta atcttgaccc cagcatacaa gcaggcgcgg tagtgagcct ccacgatatc 840

cctgccatag gctttgtctg cgcccacacc acagtaatac ggaccttggg gcccaggaaa 900

gccattggaa ggccaaccaa aagggtgccc atctgttccc atcagagtat actcctgttc 960

cattccaaac caggggtgct ggttgctcac catgtccatt atccgtttac acgagtgcct 1020

taaatttgtc tctgcaggct tccggttgta cttgaaaact tcacagaaca ccagcttgtt 1080

gggatctctg cggaaggggt cccgaaacat ggcaacaggg ctgagataca tgtcactgtt 1140

ggagccctca gactgaaagg tactagagcc atcaaaattc cactcaggta actcttctac 1200

acacttgggc tcacagtcca gggtgcgggt tttgcagcgc agtccttctc cagtaccatc 1260

aacccagata tacatggctt ggactttctc accctggggc aggcacaagt acatttgctt 1320

gatgtttttg ttcaagtggg aacttgctga ggtggccatg ccaccctgca gagtcgctct 1380

gtgttcgagg ccacacgcgt caccttaata tgcgaagtgg acctgggacc gcgccgcccc 1440

gactgcatct gcgtgttttc gccaatgaca agacgctggg cggggtttgt gtcatcatag 1500

aactaaagac atgcaaatat atttcttccg gggacaccgc cagcaaacgc gagcaacggg 1560

ccacggggat gaagcagctg gaagacta 1588

<210> 178
<211> 1910
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 178
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ttgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagcaaccag caccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc acaggtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaacta ataattagac tttgagtgat cttgagcctt 1380

tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta cttctgtggt 1440

gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa tataaaattt 1500

ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta gattccaacc 1560

tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa cctgttttgc 1620

tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca ttctactcct 1680

taccacattt gtagaggttt tacttgcttt aaaaaacctc ccacacctcc ccctgaacct 1740

gaaacataaa atgaatgcaa ttgttgttgt taacttgttt attgcagctt ataatggtta 1800

caaataaagc aatagcatca caaatttcac aaataaagca ttttttttcac tgcattctag 1860

ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc tggaagacac 1910

<210> 179
<211> 1973
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 179
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ttgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccтttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc acaggtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt 1500

ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa 1560

tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca 1620

acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt 1680

tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact 1740

ccttaccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc tccccctgaa 1800

cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag cttataatgg 1860

ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt cactgcattc 1920

tagttgtggt ttgtccaaac tcatcaatgt atcttatcat gtctggaaga cac 1973

<210> 180
<211> 2533
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 180
atgtcttcct cgagaaatct caaaacgcgt atttcggaca aacacacatt ttattattca 60

ctgcagtcac cgtccttgac acgaagctag atccagacat gataagatac attgatgagt 120

ttggacaaac cacaactaga atgcagtgaa aaaaatgctt tatttgtgaa atttgtgatg 180

ctattgcttt atttgtaacc attataagct gcaataaaca agttaacaac aacaattgca 240

ttcattttat gtttcaggtt cagggggagg tgtgggaggt tttttaaagc aagtaaaacc 300

tctacaaatg tggtatggct gattatgatc tctagtcaag gcactataca tcaaatattc 360

cttattaacc cctttacaaa ttaaaaagct aaaggtacac aatttttgag catagttatt 420

aatagcagac actctatgcc tgtgtggagt aagaaaaaac agtatgttat gattataact 480

gttatgccta cttataaagg ttacagaata tttttccata attttcttgt atagcagtgc 540

agctttttcc tttgtggtgt aaatagcaaa gcaagcaaga gttctattac taaacacagc 600

atgactcaaa aaacttagca attctgaagg aaagtccttg ggatcttcta cctttctctt 660

ctttttgga ggagtagaat gttgagagtc agcagtagcc tcatcatcac tagatggcat 720

ttcttctgag caaaacaggt tttcctcatt aaaggcattc caccactgct cccattcatc 780

agttccatag gttggaatct aaaatacaca aacaattaga atcagtagtt taacacatta 840

tacacttaaa aattttatat ttaccttaga gctttaaatc tctgtaggta gtttgtccaa 900

ttatgtcaca ccacagaagt aaggttcctt cacaaagatc tctctggggc ggggtgggat 960

gaactaggaa aggctcaaga tcactcaaag tctaattagt ttttgtattg gaagggctcg 1020

tcgccagtct cattgagaag gcatgtgcgg acgatggctt ctgtcactgc aaaggggtca 1080

caattggcag aggggcggcg atcttcaaag taacctttct tctcctggcc gacagtccgg 1140

ggaatgcgga tgctggcact gcgattggcg acaccagcag aaaagtcgtt gatgttggac 1200

gtttcgtgga acccagtcag acgacgggca ttgtccaggc ccccttggg atcgtaggct 1260

cgaatgtggt accggtgccg cttgcttagt ttctcgatgg cctcctcgat gtgcttcaga 1320

ccattctcct cccgcatggc cttggtgcta aagttggtat ggcagcctgc accattccag 1380

ttcccaggaa tgggcttggg gtcaaaggtt gctattaccc caaagtcctc acatactcga 1440

tgcaagatga aacgggccac ccagagatga tctcccatgc ggattccttc acagggtcct 1500

atttggaact cccactgggc aggcatgacc tcagcatttg ttcctgtaat cttgacccca 1560

gcatacaagc aggcgcggta gtgagcctcc acgatatccc tgccataggc tttgtctgcg 1620

cccacaccac agtaatacgg accttggggc ccaggaaagc cattggaagg ccaaccaaaa 1680

gggtgcccat ctgttcccat cagagtatac tcctgttcca ttccaaacca ggggtgctgg 1740

ttgctcacca tgtccattat ccgtttacac gagtgcctta aattagtctc tgcaggcttc 1800

cggttgtact tgaaaacttc acagaacacc agcttgttgg gatctctgcg gaaggggtcc 1860

cgaaacatgg caacagggct gagatacatg tcactgttgg agccctcaga ctgaaaggta 1920

ctagagccat caaaattcca ctcaggtaac tcttctacac acttgggctc acagtccagg 1980

gtgcgggttt tgcagcgcag tccttctcca gtaccatcaa cccagatata catggcttgg 2040

actttctcac cctggggcag gcacaagtac atttgcttga tgtttttgtt caagtgggaa 2100

cttgctgagg tggccatgtg aagtgtccca gcctgtttat ctacggctta aaaagtgttc 2160

gaggggaaaa taggttgcgc gagattatag agatctggcg cactaaaaac cagtatttca 2220

catgagtccg cgtcttttta cgcactgcct ctccctgacg cgggataaag tggtattctc 2280

aaacatatct cgcaagcctg tcttgtgtcc ctgcagagtc gctctgtgtt cgaggccaca 2340

cgcgtcacct taatatgcga agtggacctg ggaccgcgcc gccccgactg catctgcgtg 2400

ttttcgccaa tgacaagacg ctgggcgggg tttgtgtcat catagaacta aagacatgca 2460

aatatatttc ttccggggac accgccagca aacgcgagca acgggccacg gggatgaagc 2520

agctggaaga cta 2533

<210> 181
<211> 2596
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 181
atgtcttcct cgagaaatct caaaacgcgt atttcggaca aacacacatt ttattattca 60

ctgcagtcac cgtccttgac acgaagctag atccagacat gataagatac attgatgagt 120

ttggacaaac cacaactaga atgcagtgaa aaaaatgctt tatttgtgaa atttgtgatg 180

ctattgcttt atttgtaacc attataagct gcaataaaca agttaacaac aacaattgca 240

ttcattttat gtttcaggtt cagggggagg tgtgggaggt tttttaaagc aagtaaaacc 300

tctacaaatg tggtatggct gattatgatc tctagtcaag gcactataca tcaaatattc 360

cttattaacc cctttacaaa ttaaaaagct aaaggtacac aatttttgag catagttatt 420

aatagcagac actctatgcc tgtgtggagt aagaaaaaac agtatgttat gattataact 480

gttatgccta cttataaagg ttacagaata tttttccata atttcttgt atagcagtgc 540

agctttttcc tttgtggtgt aaatagcaaa gcaagcaaga gttctattac taaacacagc 600

atgactcaaa aaacttagca attctgaagg aaagtccttg ggatcttcta cctttctctt 660

ctttttgga ggagtagaat gttgagagtc agcagtagcc tcatcatcac tagatggcat 720

ttcttctgag caaaacaggt tttcctcatt aaaggcattc caccactgct cccattcatc 780

agttccatag gttggaatct aaaatacaca aacaattaga atcagtagtt taacacatta 840

tacacttaaa aattttatat ttaccttaga gctttaaatc tctgtaggta gtttgtccaa 900

ttatgtcaca ccacagaagt aaggttcctt cacaaagatc tctctggggc ggggtgggat 960

gaactaggaa aggctcaaga tcactcaaag tctaatcatt gcatccgtgt agtggtctga 1020

ccgaattcgt cgatatatct gatcatatcg cttctaatcc agtttttgta ttggaagggc 1080

tcgtcgccag tctcattgag aaggcatgtg cggacgatgg cttctgtcac tgcaaagggg 1140

tcacaattgg cagaggggcg gcgatcttca aagtaacctt tcttctcctg gccgacagtc 1200

cggggaatgc ggatgctggc actgcgattg gcgacaccag cagaaaagtc gttgatgttg 1260

gacgtttcgt ggaacccagt cagacgacgg gcattgtcca ggccccccctt gggatcgtag 1320

gctcgaatgt ggtaccggtg ccgcttgctt agtttctcga tggcctcctc gatgtgcttc 1380

agaccattct cctcccgcat ggccttggtg ctaaagttgg tatggcagcc tgcaccattc 1440

cagttcccag gaatgggctt ggggtcaaag gttgctatta ccccaaagtc ctcacatact 1500

cgatgcaaga tgaaacgggc cacccagaga tgatctccca tgcggattcc ttcacagggt 1560

cctatttgga actcccactg ggcaggcatg acctcagcat ttgttcctgt aatcttgacc 1620

ccagcataca agcaggcgcg gtagtgagcc tccacgatat ccctgccata ggctttgtct 1680

gcgcccacac cacagtaata cggaccttgg ggcccaggaa agccattgga aggccaacca 1740

aaagggtgcc catctgttcc catcagagta tactcctgtt ccattccaaa ccaggggtgc 1800

tggttgctca ccatgtccat tatccgttta cacgagtgcc ttaaattagt ctctgcaggc 1860

ttccggttgt acttgaaaac ttcacagaac accagcttgt tgggatctct gcggaagggg 1920

tcccgaaaca tggcaacagg gctgagatac atgtcactgt tggagccctc agactgaaag 1980

gtactagagc catcaaaatt ccactcaggt aactcttcta cacacttggg ctcacagtcc 2040

agggtgcggg ttttgcagcg cagtccttct ccagtaccat caacccagat atacatggct 2100

tggactttct caccctgggg caggcacaag tacatttgct tgatgttttt gttcaagtgg 2160

gaacttgctg aggtggccat gtgaagtgtc ccagcctgtt tatctacggc ttaaaaagtg 2220

ttcgagggga aaataggttg cgcgagatta tagagatctg gcgcactaaa aaccagtatt 2280

tcacatgagt ccgcgtcttt ttacgcactg cctctccctg acgcgggata aagtggtatt 2340

ctcaaacata tctcgcaagc ctgtcttgtg tccctgcaga gtcgctctgt gttcgaggcc 2400

acacgcgtca ccttaatatg cgaagtggac ctgggaccgc gccgccccga ctgcatctgc 2460

gtgttttcgc caatgacaag acgctgggcg gggtttgtgt catcatagaa ctaaagacat 2520

gcaaatatat ttcttccggg gacaccgcca gcaaacgcga gcaacgggcc acggggatga 2580

agcagctgga agacta 2596

<210> 182
<211> 2160
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 182
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaaa acatcaagca aatgtacttg tgcctgcccc 480

agggtgagaa agtccaagcc atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgagccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctcagccctg 660

ttgccatgtt tcgggacccc ttccgcagag atcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcgtgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctggggtc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccgcatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgaag cacatcgagg aggccatcga gaaactaagc aagcggcaca 1260

ggtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggact gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tttgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct taccacattt gtagaggttt tacttgcttt aaaaaacctc ccacacctcc 1980

ccctgaacct gaaacataaa atgaatgcaa ttgttgttgt taacttgttt attgcagctt 2040

ataatggtta caaataaagc aatagcatca caaatttcac aaataaagca ttttttcac 2100

tgcattctag ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc tggaagacac 2160

<210> 183
<211> 2067
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 183
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ctgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgcc gggagcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccacat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt 1500

ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa 1560

tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca 1620

acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt 1680

tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact 1740

cctccacaga cctggtgacc gtcaggaaga agattcagtg agaggacacg aggtatgtca 1800

tggtttttaa tcaataaata aagaggtttt attcatcgga cagtcgttgt agcctgtaaa 1860

agactcgccc cggagggggt tcccccgatg tgaggggcat gcagtagtat ggtgtcctga 1920

gtgtctcgga tgcgtccttg aactcgcact ctaccgccgt gggggttaat aaagttttgc 1980

tgcgccggta gggggggagg ccgaggataa taaagttgct acgtactggt tgaagtctaa 2040

caatctctcg gggggatccg aagacac 2067

<210> 184
<211> 1953
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 184
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaaacatcaa gcaaatgtac ctgtgcctgc cccagggtga 300

gaaagtccaa gccatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgagc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctcagcc ctgttgccat 480

gtttcgggac cccttccgcc gggagcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccтttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg gtcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccacat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg aagcacatcg aggaggccat cgagaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg actgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctttgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt 1500

ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa 1560

tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca 1620

acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt 1680

tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact 1740

cctctcgctt tcttgctgtc caatttctat taaaggttcc tttgttccct aagtccaact 1800

actaaactgg gggatattat gaagggcctt gagcatctgg attctgccta ataaaaaaca 1860

tttattttca ttgcaatgat gtatttaaat tatttctgaa tattttacta aaaagggaat 1920

gtgggaggtc agtgcattta aaacataaag aaa 1953

<210> 185
<211> 2067
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 185
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggcatcaa gcaaatgtac atgtccctgc cccagggtga 300

gaaaatccaa gccatgtata tctgggttga tggtaccgga gaaggactgc gctgcaagac 360

ccgtaccctg gactgtgacc ccaagtgtgt ggaagagtta cctgagtgga actttgatgg 420

ctctagtacc tttcagtctg aaggctccaa cagcgacatg tacctccatc ctgttgccat 480

gtttcgggac cccttccgca aagaccccaa caagctggtg ctatgtgaag ttttcaagta 540

taaccggaag cctgcagaaa ccaacttgag gcacatctgt aaacggataa tggacatggt 600

gagcaaccag cacccctggt ttggaatgga gcaggaatat actcttatgg gaacagacgg 660

ccacccattt ggttggcctt ccaatggctt ccctggaccc caaggcccgt attactgcgg 720

tgtgggagca gacaaggcct acggcaggga catcgtggag gctcactacc gggcctgctt 780

gtatgctgga gtcaagatca cggggacaaa tgcggaggtt atgcctgccc agtgggaatt 840

ccagatagga ccctgtgagg gaatccgaat gggagatcat ctttggatag cccgttttat 900

cttgcatcgg gtgtgcgaag attttggggt gatagcaacc tttgacccca agcccattcc 960

agggaactgg aatggtgcag gctgccatac caacttcagc accaaggcca tgcgggagga 1020

gaatggtctg aagtgcattg aggaggccat tgacaaactg agcaagaggc accagtacca 1080

catccgcgcc tacgatccca agggggggcct ggacaacgcc cggcgtctga ctggattcca 1140

cgaaacctcc aacatcaacg acttttctgc cggtgttgcc aaccgctccg ccagtatccg 1200

cattccccgg actgtcggcc aggagaagaa gggctacttt gaggaccgtc ggccttctgc 1260

caattgtgac ccctatgcgg tgacagaagc catcgtccgc acgtgtctcc tcaacgaaac 1320

aggcgacgaa cccttccaat acaagaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt 1500

ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa 1560

tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca 1620

acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt 1680

tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact 1740

cctccacaga cctggtgacc gtcaggaaga agattcagtg agaggacacg aggtatgtca 1800

tggtttttaa tcaataaata aagaggtttt attcatcgga cagtcgttgt agcctgtaaa 1860

agactcgccc cggaggggggt tcccccgatg tgaggggcat gcagtagtat ggtgtcctga 1920

gtgtctcgga tgcgtccttg aactcgcact ctaccgccgt gggggttaat aaagttttgc 1980

tgcgccggta gggggggagg ccgaggataa taaagttgct acgtactggt tgaagtctaa 2040

caatctctcg gggggatccg aagacac 2067

<210> 186
<211> 2067
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 186
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggaatcaa gcaaatgtac atgaacctgc cccagggtga 300

gaaaatccaa ctgatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgacc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctccacc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagctcccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttt ggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg atcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg cggtgcatcg aggaggccat cgacaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg atcgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctacgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt 1500

ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa 1560

ttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca 1620

acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt 1680

tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact 1740

cctccacaga cctggtgacc gtcaggaaga agattcagtg agaggacacg aggtatgtca 1800

tggtttttaa tcaataaata aagaggtttt attcatcgga cagtcgttgt agcctgtaaa 1860

agactcgccc cggagggggt tcccccgatg tgaggggcat gcagtagtat ggtgtcctga 1920

gtgtctcgga tgcgtccttg aactcgcact ctaccgccgt gggggttaat aaagttttgc 1980

tgcgccggta gggggggagg ccgaggataa taaagttgct acgtactggt tgaagtctaa 2040

caatctctcg gggggatccg aagacac 2067

<210> 187
<211> 1961
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 187
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggtggca tggccacctc 240

agcaagttcc cacttgaaca aaggaatcaa gcaaatgtac atgaacctgc cccagggtga 300

gaaaatccaa ctgatgtata tctgggttga tggtactgga gaaggactgc gctgcaaaac 360

ccgcaccctg gactgtgacc ccaagtgtgt agaagagtta cctgagtgga attttgatgg 420

ctctagtacc tttcagtctg agggctccaa cagtgacatg tatctccacc ctgttgccat 480

gtttcgggac cccttccgca gagatcccaa caagctggtg ttctgtgaag ttttcaagta 540

caaccggaag cctgcagaga caaatttaag gcactcgtgt aaacggataa tggacatggt 600

gagctcccag cacccctggt ttggaatgga acaggagtat actctgatgg gaacagatgg 660

gcacccttttggttggcctt ccaatggctt tcctgggccc caaggtccgt attactgtgg 720

tgtgggcgca gacaaagcct atggcaggga tatcgtggag gctcactacc gcgcctgctt 780

gtatgctggg atcaagatta caggaacaaa tgctgaggtc atgcctgccc agtgggagtt 840

ccaaatagga ccctgtgaag gaatccgcat gggagatcat ctctgggtgg cccgtttcat 900

cttgcatcga gtatgtgagg actttggggt aatagcaacc tttgacccca agcccattcc 960

tgggaactgg aatggtgcag gctgccatac caactttagc accaaggcca tgcgggagga 1020

gaatggtctg cggtgcatcg aggaggccat cgacaaacta agcaagcggc accagtacca 1080

cattcgagcc tacgatccca agggggggcct ggacaatgcc cgtcgtctga ctgggttcca 1140

cgaaacgtcc aacatcaacg acttttctgc tggtgtcgcc aatcgcagtg ccagcatccg 1200

cattccccgg atcgtcggcc aggagaagaa aggttacttt gaagatcgcc gcccctctgc 1260

caattgtgac ccctacgcag tgacagaagc catcgtccgc acatgccttc tcaatgagac 1320

tggcgacgag cccttccaat acaaaaactg gatccgctca gacatgataa gatacattga 1380

tgagtttgga caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc 1440

ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt 1500

ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa 1560

tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca 1620

acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt 1680

tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact 1740

cctctcgctt tcttgctgtc caatttctat taaaggttcc tttgttccct aagtccaact 1800

actaaactgg gggatattat gaagggcctt gagcatctgg attctgccta ataaaaaaca 1860

tttattttca ttgcaatgat gtatttaaat tatttctgaa tattttacta aaaagggaat 1920

gtgggaggtc agtgcattta aaacataaag aaagaagaca c 1961

<210> 188
<211> 2254
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 188
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaag gcatcaagca aatgtacatg tccctgcccc 480

agggtgagaa aatccaagcc atgtatatct gggttgatgg taccggagaa ggactgcgct 540

gcaagacccg taccctggac tgtgacccca agtgtgtgga agagttacct gagtggaact 600

ttgatggctc tagtaccttt cagtctgaag gctccaacag cgacatgtac ctccatcctg 660

ttgccatgtt tcgggacccc ttccgcaaag accccaacaa gctggtgcta tgtgaagttt 720

tcaagtataa ccggaagcct gcagaaacca acttgaggca catctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggagca ggaatatact cttatgggaa 840

cagacggcca cccatttggt tggccttcca atggcttccc tggaccccaa ggcccgtatt 900

actgcggtgt gggagcagac aaggcctacg gcagggacat cgtggaggct cactaccggg 960

cctgcttgta tgctggagtc aagatcacgg ggacaaatgc ggaggttatg cctgcccagt 1020

gggaattcca gataggaccc tgtgagggaa tccgaatggg agatcatctt tggatagccc 1080

gttttatctt gcatcgggtg tgcgaagatt ttggggtgat agcaaccttt gaccccaagc 1140

ccattccagg gaactggaat ggtgcaggct gccataccaa cttcagcacc aaggccatgc 1200

gggaggagaa tggtctgaag tgcattgagg aggccattga caaactgagc aagaggcacc 1260

agtaccacat ccgcgcctac gatcccaagg ggggcctgga caacgcccgg cgtctgactg 1320

gattccacga aacctccaac atcaacgact tttctgccgg tgttgccaac cgctccgcca 1380

gtatccgcat tccccggact gtcggccagg agaagaaggg ctactttgag gaccgtcggc 1440

cttctgccaa ttgtgacccc tatgcggtga cagaagccat cgtccgcacg tgtctcctca 1500

acgaaacagg cgacgaaccc ttccaataca agaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct ccacagacct ggtgaccgtc aggaagaaga ttcagtgaga ggacacgagg 1980

tatgtcatgg tttttaatca ataaataaag aggttttatt catcggacag tcgttgtagc 2040

ctgtaaaaga ctcgccccgg agggggttcc cccgatgtga ggggcatgca gtagtatggt 2100

gtcctgagtg tctcggatgc gtccttgaac tcgcactcta ccgccgtggg ggttaataaa 2160

gttttgctgc gccggtaggg ggggaggccg aggataataa agttgctacg tactggttga 2220

agtctaacaa tctctcgggg ggatccgaag acac 2254

<210> 189
<211> 2254
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 189
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaag gaatcaagca aatgtacatg aacctgcccc 480

agggtgagaa aatccaactg atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgacccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctccaccctg 660

ttgccatgtt tcgggacccc ttccgcagag atcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcgtgtaaa cggataatgg 780

acatggtgag ctcccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctgggatc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccgcatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgcgg tgcatcgagg aggccatcga caaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggatc gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tacgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct ccacagacct ggtgaccgtc aggaagaaga ttcagtgaga ggacacgagg 1980

tatgtcatgg tttttaatca ataaataaag aggttttatt catcggacag tcgttgtagc 2040

ctgtaaaaga ctcgccccgg agggggttcc cccgatgtga ggggcatgca gtagtatggt 2100

gtcctgagtg tctcggatgc gtccttgaac tcgcactcta ccgccgtggg ggttaataaa 2160

gttttgctgc gccggtaggg ggggaggccg aggataataa agttgctacg tactggttga 2220

agtctaacaa tctctcgggg ggatccgaag acac 2254

<210> 190
<211> 2148
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 190
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaag gaatcaagca aatgtacatg aacctgcccc 480

agggtgagaa aatccaactg atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgacccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctccaccctg 660

ttgccatgtt tcgggacccc ttccgcagag atcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcgtgtaaa cggataatgg 780

acatggtgag ctcccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctgggatc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccgcatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgcgg tgcatcgagg aggccatcga caaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggatc gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tacgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct ctcgctttct tgctgtccaa tttctattaa aggttccttt gttccctaag 1980

tccaactact aaactggggg atattatgaa gggccttgag catctggatt ctgcctaata 2040

aaaaacattt attttcattg caatgatgta tttaaattat ttctgaatat tttactaaaa 2100

agggaatgtg ggaggtcagt gcatttaaaa cataaagaaa gaagacac 2148

<210> 191
<211> 2254
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 191
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaaa acatcaagca aatgtacctg tgcctgcccc 480

agggtgagaa agtccaagcc atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgagccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctcagccctg 660

ttgccatgtt tcgggacccc ttccgccggg agcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctggggtc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccacatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgaag cacatcgagg aggccatcga gaaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggact gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tttgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct ccacagacct ggtgaccgtc aggaagaaga ttcagtgaga ggacacgagg 1980

tatgtcatgg tttttaatca ataaataaag aggttttatt catcggacag tcgttgtagc 2040

ctgtaaaaga ctcgccccgg agggggttcc cccgatgtga ggggcatgca gtagtatggt 2100

gtcctgagtg tctcggatgc gtccttgaac tcgcactcta ccgccgtggg ggttaataaa 2160

gttttgctgc gccggtaggg ggggaggccg aggataataa agttgctacg tactggttga 2220

agtctaacaa tctctcgggg ggatccgaag acac 2254

<210> 192
<211> 2148
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 192
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaaa acatcaagca aatgtacctg tgcctgcccc 480

agggtgagaa agtccaagcc atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgagccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctcagccctg 660

ttgccatgtt tcgggacccc ttccgccggg agcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctggggtc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccacatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgaag cacatcgagg aggccatcga gaaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggact gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tttgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct ctcgctttct tgctgtccaa tttctattaa aggttccttt gttccctaag 1980

tccaactact aaactggggg atattatgaa gggccttgag catctggatt ctgcctaata 2040

aaaaacattt attttcattg caatgatgta tttaaattat ttctgaatat tttactaaaa 2100

agggaatgtg ggaggtcagt gcatttaaaa cataaagaaa gaagacac 2148

<210> 193
<211> 2147
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 193
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaaa acatcaagca aatgtacctg tgcctgcccc 480

agggtgagaa agtccaagcc atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgagccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctcagccctg 660

ttgccatgtt tcgggacccc ttccgccggg agcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctggggtc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccacatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgaag cacatcgagg aggccatcga gaaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggact gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tttgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactggat ccgctcagac atgataagat 1560

acattgatga gtttggacaa accacaacta gaatgcagtg ataattagac tttgagtgat 1620

cttgagcctt tcctagttca tcccaccccg ccccagagag atctttgtga aggaacctta 1680

cttctgtggt gtgacataat tggacaaact acctacagag atttaaagct ctaaggtaaa 1740

tataaaattt ttaagtgtat aatgtgttaa actactgatt ctaattgttt gtgtatttta 1800

gattccaacc tatggaactg atgaatggga gcagtggtgg aatgccttta atgaggaaaa 1860

cctgttttgc tcagaagaaa tgccatctag tgatgatgag gctactgctg actctcaaca 1920

ttctactcct ctcgctttct tgctgtccaa tttctattaa aggttccttt gttccctaag 1980

tccaactact aaactggggg atattatgaa gggccttgag catctggatt ctgcctaata 2040

aaaaacattt attttcattg caatgatgta tttaaattat ttctgaatat tttactaaaa 2100

agggaatgtg ggaggtcagt gcatttaaaa cataaagaaa gaagacc 2147

<210> 194
<211> 2191
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 194
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaaa acatcaagca aatgtacctg tgcctgcccc 480

agggtgagaa agtccaagcc atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgagccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctcagccctg 660

ttgccatgtt tcgggacccc ttccgccggg agcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctggggtc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccacatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgaag cacatcgagg aggccatcga gaaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggact gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tttgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactaata attagacttt gagtgatctt 1560

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1620

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1680

aaaattttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 1740

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 1800

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 1860

tactcctcca cagacctggt gaccgtcagg aagaagattc agtgagagga cacgaggtat 1920

gtcatggttt ttaatcaata ataaaagagg ttttattcat cggacagtcg ttgtagcctg 1980

taaaagactc gccccggagg gggttccccc gatgtgaggg gcatgcagta gtatggtgtc 2040

ctgagtgtct cggatgcgtc cttgaactcg cactctaccg ccgtgggggt taataaagtt 2100

ttgctgcgcc ggtaggggggg gaggccgagg ataataaagt tgctacgtac tggttgaagt 2160

ctaacaatct ctcgggggga tccgaagaca c 2191

<210> 195
<211> 2085
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 195
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaaa acatcaagca aatgtacctg tgcctgcccc 480

agggtgagaa agtccaagcc atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgagccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctcagccctg 660

ttgccatgtt tcgggacccc ttccgccggg agcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctggggtc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccacatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgaag cacatcgagg aggccatcga gaaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggact gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tttgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactaata attagacttt gagtgatctt 1560

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1620

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1680

aaaatttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 1740

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 1800

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 1860

tactcctctc gctttcttgc tgtccaattt ctattaaagg ttcctttgtt ccctaagtcc 1920

aactactaaa ctgggggata ttatgaaggg ccttgagcat ctggattctg cctaataaaa 1980

aacatttatt ttcattgcaa tgatgtattt aaattatttc tgaatatttt actaaaaagg 2040

gaatgtggga ggtcagtgca tttaaaacat aaagaaagaa gacac 2085

<210> 196
<211> 2191
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 196
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaag gcatcaagca aatgtacatg tccctgcccc 480

agggtgagaa aatccaagcc atgtatatct gggttgatgg taccggagaa ggactgcgct 540

gcaagacccg taccctggac tgtgacccca agtgtgtgga agagttacct gagtggaact 600

ttgatggctc tagtaccttt cagtctgaag gctccaacag cgacatgtac ctccatcctg 660

ttgccatgtt tcgggacccc ttccgcaaag accccaacaa gctggtgcta tgtgaagttt 720

tcaagtataa ccggaagcct gcagaaacca acttgaggca catctgtaaa cggataatgg 780

acatggtgag caaccagcac ccctggtttg gaatggagca ggaatatact cttatgggaa 840

cagacggcca cccatttggt tggccttcca atggcttccc tggaccccaa ggcccgtatt 900

actgcggtgt gggagcagac aaggcctacg gcagggacat cgtggaggct cactaccggg 960

cctgcttgta tgctggagtc aagatcacgg ggacaaatgc ggaggttatg cctgcccagt 1020

gggaattcca gataggaccc tgtgagggaa tccgaatggg agatcatctt tggatagccc 1080

gttttatctt gcatcgggtg tgcgaagatt ttggggtgat agcaaccttt gaccccaagc 1140

ccattccagg gaactggaat ggtgcaggct gccataccaa cttcagcacc aaggccatgc 1200

gggaggagaa tggtctgaag tgcattgagg aggccattga caaactgagc aagaggcacc 1260

agtaccacat ccgcgcctac gatcccaagg ggggcctgga caacgcccgg cgtctgactg 1320

gattccacga aacctccaac atcaacgact tttctgccgg tgttgccaac cgctccgcca 1380

gtatccgcat tccccggact gtcggccagg agaagaaggg ctactttgag gaccgtcggc 1440

cttctgccaa ttgtgacccc tatgcggtga cagaagccat cgtccgcacg tgtctcctca 1500

acgaaacagg cgacgaaccc ttccaataca agaactaata attagacttt gagtgatctt 1560

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1620

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1680

aaaattttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 1740

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 1800

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 1860

tactcctcca cagacctggt gaccgtcagg aagaagattc agtgagagga cacgaggtat 1920

gtcatggttt ttaatcaata aataaagagg ttttattcat cggacagtcg ttgtagcctg 1980

taaaagactc gccccggagg gggttccccc gatgtgaggg gcatgcagta gtatggtgtc 2040

ctgagtgtct cggatgcgtc cttgaactcg cactctaccg ccgtgggggt taataaagtt 2100

ttgctgcgcc ggtaggggggg gaggccgagg ataataaagt tgctacgtac tggttgaagt 2160

ctaacaatct ctcgggggga tccgaagaca c 2191

<210> 197
<211> 2191

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 197
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaag gaatcaagca aatgtacatg aacctgcccc 480

agggtgagaa aatccaactg atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgacccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctccaccctg 660

ttgccatgtt tcgggacccc ttccgcagag atcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcgtgtaaa cggataatgg 780

acatggtgag ctcccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctgggatc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccgcatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgcgg tgcatcgagg aggccatcga caaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggatc gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tacgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactaata attagacttt gagtgatctt 1560

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1620

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1680

aaaattttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 1740

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 1800

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 1860

tactcctcca cagacctggt gaccgtcagg aagaagattc agtgagagga cacgaggtat 1920

gtcatggttt ttaatcaata aataaagagg ttttattcat cggacagtcg ttgtagcctg 1980

taaaagactc gccccggagg gggttccccc gatgtgaggg gcatgcagta gtatggtgtc 2040

ctgagtgtct cggatgcgtc cttgaactcg cactctaccg ccgtgggggt taataaagtt 2100

ttgctgcgcc ggtaggggggg gaggccgagg ataataaagt tgctacgtac tggttgaagt 2160

ctaacaatct ctcgggggga tccgaagaca c 2191

<210> 198
<211> 2085
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 198
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatgg 420

ccacctcagc aagttcccac ttgaacaaag gaatcaagca aatgtacatg aacctgcccc 480

agggtgagaa aatccaactg atgtatatct gggttgatgg tactggagaa ggactgcgct 540

gcaaaacccg caccctggac tgtgacccca agtgtgtaga agagttacct gagtggaatt 600

ttgatggctc tagtaccttt cagtctgagg gctccaacag tgacatgtat ctccaccctg 660

ttgccatgtt tcgggacccc ttccgcagag atcccaacaa gctggtgttc tgtgaagttt 720

tcaagtacaa ccggaagcct gcagagacaa atttaaggca ctcgtgtaaa cggataatgg 780

acatggtgag ctcccagcac ccctggtttg gaatggaaca ggagtatact ctgatgggaa 840

cagatgggca ccctttttggt tggccttcca atggctttcc tgggccccaa ggtccgtatt 900

actgtggtgt gggcgcagac aaagcctatg gcagggatat cgtggaggct cactaccgcg 960

cctgcttgta tgctgggatc aagattacag gaacaaatgc tgaggtcatg cctgcccagt 1020

gggagttcca aataggaccc tgtgaaggaa tccgcatggg agatcatctc tgggtggccc 1080

gtttcatctt gcatcgagta tgtgaggact ttggggtaat agcaaccttt gaccccaagc 1140

ccattcctgg gaactggaat ggtgcaggct gccataccaa ctttagcacc aaggccatgc 1200

gggaggagaa tggtctgcgg tgcatcgagg aggccatcga caaactaagc aagcggcacc 1260

agtaccacat tcgagcctac gatcccaagg ggggcctgga caatgcccgt cgtctgactg 1320

ggttccacga aacgtccaac atcaacgact tttctgctgg tgtcgccaat cgcagtgcca 1380

gcatccgcat tccccggatc gtcggccagg agaagaaagg ttactttgaa gatcgccgcc 1440

cctctgccaa ttgtgacccc tacgcagtga cagaagccat cgtccgcaca tgccttctca 1500

atgagactgg cgacgagccc ttccaataca aaaactaata attagacttt gagtgatctt 1560

gagcctttcc tagttcatcc caccccgccc cagagagatc tttgtgaagg aaccttactt 1620

ctgtggtgtg acataattgg acaaactacc tacagagatt taaagctcta aggtaaatat 1680

aaaatttta agtgtataat gtgttaaact actgattcta attgtttgtg tattttagat 1740

tccaacctat ggaactgatg aatgggagca gtggtggaat gcctttaatg aggaaaacct 1800

gttttgctca gaagaaatgc catctagtga tgatgaggct actgctgact ctcaacattc 1860

tactcctctc gctttcttgc tgtccaattt ctattaaagg ttcctttgtt ccctaagtcc 1920

aactactaaa ctgggggata ttatgaaggg ccttgagcat ctggattctg cctaataaaa 1980

aacatttatt ttcattgcaa tgatgtattt aaattatttc tgaatatttt actaaaaagg 2040

gaatgtggga ggtcagtgca tttaaaacat aaagaaagaa gacac 2085

<210> 199
<211> 1846
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 199
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg tggcatggcc 120

acctcagcaa gttcccactt gaacaaaaac atcaagcaaa tgtacctgtg cctgccccag 180

ggtgagaaag tccaagccat gtatatctgg gttgatggta ctggagaagg actgcgctgc 240

aaaacccgca ccctggactg tgagcccaag tgtgtagaag agttacctga gtggaatttt 300

gatggctcta gtacctttca gtctgagggc tccaacagtg acatgtatct cagccctgtt 360

gccatgtttc gggacccctt ccgccgggag cccaacaagc tggtgttctg tgaagttttc 420

aagtacaacc ggaagcctgc agagacaaat ttaaggcact cctgtaaacg gataatggac 480

atggtgagca accagcaccc ctggtttgga atggaacagg agtatactct gatgggaaca 540

gatgggcacc cttttggttg gccttccaat ggctttcctg ggccccaagg tccgtattac 600

tgtggtgtgg gcgcagacaa agcctatggc agggatatcg tggaggctca ctaccgcgcc 660

tgcttgtatg ctggggtcaa gattacagga acaaatgctg aggtcatgcc tgcccagtgg 720

gagttccaaa taggaccctg tgaaggaatc cacatgggag atcatctctg ggtggcccgt 780

ttcatcttgc atcgagtatg tgaggacttt ggggtaatag caacctttga ccccaagccc 840

attcctggga actggaatgg tgcaggctgc cataccaact ttagcaccaa ggccatgcgg 900

gaggagaatg gtctgaagca catcgaggag gccatcgaga aactaagcaa gcggcaccag 960

taccacattc gagcctacga tcccaagggg ggcctggaca atgcccgtcg tctgactggg 1020

ttccacgaaa cgtccaacat caacgacttt tctgctggtg tcgccaatcg cagtgccagc 1080

atccgcattc cccggactgt cggccaggag aagaaaggtt actttgaaga tcgccgcccc 1140

tctgccaatt gtgacccctt tgcagtgaca gaagccatcg tccgcacatg ccttctcaat 1200

gagactggcg acgagccctt ccaatacaaa aactggatcc gctcagacat gataagatac 1260

attgatgagt ttggacaaac cacaactaga atgcagtgat aattagactt tgagtgatct 1320

tgagcctttc ctagttcatc ccaccccgcc ccagagagat ctttgtgaag gaaccttact 1380

tctgtggtgt gacataattg gacaaactac ctacagagat ttaaagctct aaggtaaata 1440

taaaattttt aagtgtataa tgtgttaaac tactgattct aattgtttgt gtattttaga 1500

ttccaaccta tggaactgat gaatgggagc agtggtggaa tgcctttaat gaggaaaacc 1560

tgttttgctc agaagaaatg ccatctagtg atgatgaggc tactgctgac tctcaacatt 1620

ctactcctct cgctttcttg ctgtccaatt tctattaaag gttcctttgt tccctaagtc 1680

caactactaa actgggggat attatgaagg gccttgagca tctggattct gcctaataaa 1740

aaacatttat tttcattgca atgatgtatt taaattattt ctgaatattt tactaaaaag 1800

ggaatgtggg aggtcagtgc atttaaaaca taaagaaaga agacac 1846

<210> 200
<211> 2212
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 200
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg tggcatggcc 120

acctcagcaa gttcccactt gaacaaaggc atcaagcaaa tgtacatgtc cctgccccag 180

ggtgagaaaa tccaagccat gtatatctgg gttgatggta ccggagaagg actgcgctgc 240

aagacccgta ccctggactg tgaccccaag tgtgtggaag agttacctga gtggaacttt 300

gatggctcta gtacctttca gtctgaaggc tccaacagcg acatgtacct ccatcctgtt 360

gccatgtttc gggacccctt ccgcaaagac cccaacaagc tggtgctatg tgaagttttc 420

aagtataacc ggaagcctgc agaaaccaac ttgaggcaca tctgtaaacg gataatggac 480

atggtgagca accagcaccc ctggtttgga atggagcagg aatatactct tatgggaaca 540

gacggccacc catttggttg gccttccaat ggcttccctg gaccccaagg cccgtattac 600

tgcggtgtgg gagcagacaa ggcctacggc agggacatcg tggaggctca ctaccgggcc 660

tgcttgtatg ctggagtcaa gatcacgggg acaaatgcgg aggttatgcc tgcccagtgg 720

gaattccaga taggaccctg tgagggaatc cgaatgggag atcatctttg gatagcccgt 780

tttatcttgc atcgggtgtg cgaagatttt ggggtgatag caacctttga ccccaagccc 840

attccaggga actggaatgg tgcaggctgc cataccaact tcagcaccaa ggccatgcgg 900

gaggagaatg gtctgaagtg cattgaggag gccattgaca aactgagcaa gaggcaccag 960

taccacatcc gcgcctacga tcccaagggg ggcctggaca acgcccggcg tctgactgga 1020

ttccacgaaa cctccaacat caacgacttt tctgccggtg ttgccaaccg ctccgccagt 1080

atccgcattc cccggactgt cggccaggag aagaagggct actttgagga ccgtcggcct 1140

tctgccaatt gtgaccccta tgcggtgaca gaagccatcg tccgcacgtg tctcctcaac 1200

gaaacaggcg acgaaccctt ccaatacaag aactggatcc gctcagatat gatccgctat 1260

atcgacgaat tcggccagac taccactcgc atgcaatgat aattagactt tgagtgatct 1320

tgagcctttc ctagttcatc ccaccccgcc ccagagagat ctttgtgaag gaaccttact 1380

tctgtggtgt gacataattg gacaaactac ctacagagat ttaaagctct aaggtaaata 1440

taaaattttt aagtgtataa tgtgttaaac tactgattct aattgtttgt gtattttaga 1500

ttccaaccta tggaactgat gaatgggagc agtggtggaa tgcctttaat gaggaaaacc 1560

tgttttgctc agaagaaatg ccatctagtg atgatgaggc tactgctgac tctcaacatt 1620

ctactcctcc aaaaaagaag agaaaggtag aagatcccaa ggactttcct tcagaattgc 1680

taagtttttt gagtcatgct gtgtttagta atagaactct tgcttgcttt gctatttaca 1740

ccacaaagga aaaagctgca ctgctataca agaaaattat ggaaaaatat tctgtaacct 1800

ttataagtag gcataacagt tataatcata acatactgtt ttttcttact ccacacaggc 1860

atagagtgtc tgctattaat aactatgctc aaaaattgtg tacctttagc tttttaattt 1920

gtaaaggggt taataaggaa tatttgatgt atagtgcctt gactagagat cataatcagc 1980

cataccacat ttgtagaggt tttacttgct ttaaaaaacc tcccacacct ccccctgaac 2040

ctgaaacata aaatgaatgc aattgttgtt gttaacttgt ttattgcagc ttataatggt 2100

tacaaataaa gcaatagcat cacaaatttc acaaataaag catttttttc actgcattct 2160

agttgtggtt tgtccaaact catcaatgta tcttatcatg tctggaagac ac 2212

<210> 201
<211> 2149
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 201
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg tggcatggcc 120

acctcagcaa gttcccactt gaacaaaggc atcaagcaaa tgtacatgtc cctgccccag 180

ggtgagaaaa tccaagccat gtatatctgg gttgatggta ccggagaagg actgcgctgc 240

aagacccgta ccctggactg tgaccccaag tgtgtggaag agttacctga gtggaacttt 300

gatggctcta gtacctttca gtctgaaggc tccaacagcg acatgtacct ccatcctgtt 360

gccatgtttc gggacccctt ccgcaaagac cccaacaagc tggtgctatg tgaagttttc 420

aagtataacc ggaagcctgc agaaaccaac ttgaggcaca tctgtaaacg gataatggac 480

atggtgagca accagcaccc ctggtttgga atggagcagg aatatactct tatgggaaca 540

gacggccacc catttggttg gccttccaat ggcttccctg gaccccaagg cccgtattac 600

tgcggtgtgg gagcagacaa ggcctacggc agggacatcg tggaggctca ctaccgggcc 660

tgcttgtatg ctggagtcaa gatcacgggg acaaatgcgg aggttatgcc tgcccagtgg 720

gaattccaga taggaccctg tgagggaatc cgaatgggag atcatctttg gatagcccgt 780

tttatcttgc atcgggtgtg cgaagatttt ggggtgatag caacctttga ccccaagccc 840

attccaggga actggaatgg tgcaggctgc cataccaact tcagcaccaa ggccatgcgg 900

gaggagaatg gtctgaagtg cattgaggag gccattgaca aactgagcaa gaggcaccag 960

taccacatcc gcgcctacga tcccaagggg ggcctggaca acgcccggcg tctgactgga 1020

ttccacgaaa cctccaacat caacgacttt tctgccggtg ttgccaaccg ctccgccagt 1080

atccgcattc cccggactgt cggccaggag aagaagggct actttgagga ccgtcggcct 1140

tctgccaatt gtgaccccta tgcggtgaca gaagccatcg tccgcacgtg tctcctcaac 1200

gaaacaggcg acgaaccctt ccaatacaag aactaataat tagactttga gtgatcttga 1260

gcctttccta gttcatccca ccccgcccca gagagatctt tgtgaaggaa ccttacttct 1320

gtggtgtgac ataattggac aaactaccta cagagattta aagctctaag gtaaatataa 1380

aatttttaag tgtataatgt gttaaactac tgattctaat tgtttgtgta ttttagattc 1440

caacctatgg aactgatgaa tgggagcagt ggtggaatgc ctttaatgag gaaaacctgt 1500

tttgctcaga agaaatgcca tctagtgatg atgaggctac tgctgactct caacattcta 1560

ctcctccaaa aaagaagaga aaggtagaag atcccaagga ctttccttca gaattgctaa 1620

gtttttgag tcatgctgtg tttagtaata gaactcttgc ttgctttgct atttacacca 1680

caaaggaaaa agctgcactg ctatacaaga aaattatgga aaaatattct gtaaccttta 1740

taagtaggca taacagttat aatcataaca tactgttttt tcttactcca cacaggcata 1800

gagtgtctgc tattaataac tatgctcaaa aattgtgtac ctttagcttt ttaatttgta 1860

aaggggttaa taaggaatat ttgatgtata gtgccttgac tagagatcat aatcagccat 1920

accacatttg tagaggtttt acttgcttta aaaaacctcc cacacctccc cctgaacctg 1980

aaacataaaa tgaatgcaat tgttgttgtt aacttgttta ttgcagctta taatggttac 2040

aaataaagca atagcatcac aaatttcaca aataaagcat ttttttcact gcattctagt 2100

tgtggtttgt ccaaactcat caatgtatct tatcatgtct ggaagacac 2149

<210> 202
<211> 2548
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 202
ttgtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat ggccacctca gcaagttccc acttgaacaa aaacatcaag caaatgtact 720

tgtgcctgcc ccagggtgag aaagtccaag ccatgtatat ctgggttgat ggtactggag 780

aaggactgcg ctgcaaaacc cgcaccctgg actgtgagcc caagtgtgta gaagagttac 840

ctgagtggaa ttttgatggc tctagtacct ttcagtctga gggctccaac agtgacatgt 900

atctcagccc tgttgccatg tttcgggacc ccttccgcag agatcccaac aagctggtgt 960

tctgtgaagt tttcaagtac aaccggaagc ctgcagagac aaatttaagg cactcgtgta 1020

aacggataat ggacatggtg agcaaccagc acccctggtt tggaatggaa caggagtata 1080

ctctgatggg aacagatggg cacccttttg gttggccttc caatggcttt cctgggcccc 1140

aaggtccgta ttactgtggt gtgggcgcag acaaagccta tggcagggat atcgtggagg 1200

ctcactaccg cgcctgcttg tatgctgggg tcaagattac aggaacaaat gctgaggtca 1260

tgcctgccca gtgggagttc caaataggac cctgtgaagg aatccgcatg ggagatcatc 1320

tctgggtggc ccgtttcatc ttgcatcgag tatgtgagga ctttggggta tagcaacct 1380

ttgaccccaa gcccattcct gggaactgga atggtgcagg ctgccatacc aactttagca 1440

ccaaggccat gcgggaggag aatggtctga agcacatcga ggaggccatc gagaaactaa 1500

gcaagcggca caggtaccac attcgagcct acgatcccaa ggggggcctg gacaatgccc 1560

gtcgtctgac tgggttccac gaaacgtcca acatcaacga cttttctgct ggtgtcgcca 1620

atcgcagtgc cagcatccgc attccccgga ctgtcggcca ggagaagaaa ggttactttg 1680

aagatcgccg cccctctgcc aattgtgacc cctttgcagt gacagaagcc atcgtccgca 1740

catgccttct caatgagact ggcgacgagc ccttccaata caaaaactgg atccgctcag 1800

acatgataag atacattgat gagtttggac aaaccacaac tagaatgcag tgaaaaaaat 1860

gctttatttg tgaaatttgt gatgctattg ctttatttgt aaccattata agctgcaata 1920

aacaagttaa caacaacaat tgcattcatt ttatgtttca ggttcagggg gaggtgtggg 1980

aggtttttta aagcaagtaa aacctctaca aatgtggtaa aatcgataat atatggtagg 2040

gttcatagcc agagtaacct tttttttaa tttttatttt attttatttt tgagtcgggc 2100

gcgccaaaat gaagtgaagt tcctatactt tctagataga ctctgggtag aatgttctgt 2160

ttcctgtaat ataaaatcat aaagtgatga tattatcaag tgaaaaggaa atgtggtacc 2220

ttaatctttc cacatcaagc caatatcatg ctgaaggcca gagaatcttt tttgctaaaa 2280

aacacaatac agatataatt aatagttatc atttatgttt gatattaatc atatgaatat 2340

aattaatatg ttttattgta tcgattattg ttgatattaa tgtaattact actaatacat 2400

aacaaatata actaatggtt atggctcagt aactaaggta agatataagc tacactggta 2460

aagaaagatc aatattgctt cagagtacac tgaagtaaat gaataactta accggtctag 2520

gttgtcactt atatttatac gaagactt 2548

<210> 203
<211> 1868
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 203
gtgtcttctt tctttatgtt ttaaatgcac tgatctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtt agtttttgta ttggaagggc 240

tcgtcgccag tctcattgag aaggcatgtg cggacgatgg cttctgtcac tgcaaagggg 300

tcacaattgg cagaggggcg gcgatcttca aagtaacctt tcttctcctg gccgacagtc 360

cggggaatgc ggatgctggc actgcgattg gcgacaccag cagaaaagtc gttgatgttg 420

gacgtttcgt ggaacccagt cagacgacgg gcattgtcca ggccccccctt gggatcgtag 480

gctcgaatgt ggtaccggtg ccgcttgctt agtttctcga tggcctcctc gatgtgcttc 540

agaccattct cctcccgcat ggccttggtg ctaaagttgg tatggcagcc tgcaccattc 600

cagttcccag gaatgggctt ggggtcaaag gttgctatta ccccaaagtc ctcacatact 660

cgatgcaaga tgaaacgggc cacccagaga tgatctccca tgcggattcc ttcacagggt 720

cctatttgga actcccactg ggcaggcatg acctcagcat ttgttcctgt aatcttgacc 780

ccagcataca agcaggcgcg gtagtgagcc tccacgatat ccctgccata ggctttgtct 840

gcgcccacac cacagtaata cggaccttgg ggcccaggaa agccattgga aggccaacca 900

aaagggtgcc catctgttcc catcagagta tactcctgtt ccattccaaa ccaggggtgc 960

tggttgctca ccatgtccat tatccgttta cacgagtgcc ttaaatttgt ctctgcaggc 1020

ttccggttgt acttgaaaac ttcacagaac accagcttgt tgggatctct gcggaagggg 1080

tcccgaaaca tggcaacagg gctgagatac atgtcactgt tggagccctc agactgaaag 1140

gtactagagc catcaaaatt ccactcaggt aactcttcta cacacttggg ctcacagtcc 1200

agggtgcggg ttttgcagcg cagtccttct ccagtaccat caacccagat atacatggct 1260

tggactttct caccctgggg caggcacaag tacatttgct tgatgttttt gttcaagtgg 1320

gaacttgctg aggtggccat ggtggcgacg tgcgctccgg aggcttgcag aatgcggaac 1380

accgcgcggg caggaacagg gcccacacta ccgccccaca ccccgcctcc cgcaccgccc 1440

cttcccggcc gctgctctca gaaagcgaag gagcaaagct gctattggcc gctgccccaa 1500

aggcctaccc gcttccattg ctcagcggtg ctgtccatct gcacgagact agtgagtcgt 1560

gctacttcca tttgtcacgt cctgcacgac gcgagctgcg gggcgggggg gaacttcctg 1620

actaggggag gagtagaagg tggcgcgaag gggccaccaa agaacggagc cggttggcgc 1680

ctaccggtgg atgtggaatg tgtgcgaggc cagaggccac ttgtgtagcg ccaagtgccc 1740

agcggggctg ctaaagcgca tgctccagac tgccttggga aaagcgcctc ccctacccgg 1800

tagagaaact tgatctgtcg ccgcaattca aacttcgtga ggctccggtg cccgtcagtg 1860

gaagacta 1868

<210> 204
<211> 1866
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 204
tagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

gaggctggga aggggtgggt ccgggggcgg gctcaggggc gggctcaggg gcggggcggg 420

cgcccgaagg tcctccggag gcccggcatt ctgcacgctt caaaagcgca cgtctgccgc 480

gctgttctcc tcttcctcat ctccgggcct ttcgtccgcc accatggcca cctcagcaag 540

ttcccacttg aacaaaaaca tcaagcaaat gtacctgtgc ctgccccagg gtgagaaagt 600

ccaagccatg tatatctggg ttgatggtac tggagaagga ctgcgctgca aaacccgcac 660

cctggactgt gagcccaagt gtgtagaaga gttacctgag tggaattttg atggctctag 720

taccttttcag tctgagggct ccaacagtga catgtatctc agccctgttg ccatgtttcg 780

ggacccccttc cgccgggagc ccaacaagct ggtgttctgt gaagttttca agtacaaccg 840

gaagcctgca gagacaaatt taaggcactc ctgtaaacgg ataatggaca tggtgagcaa 900

ccagcacccc tggtttggaa tggaacagga gtatactctg atgggaacag atgggcaccc 960

ttttggttgg ccttccaatg gctttcctgg gccccaaggt ccgtattact gtggtgtggg 1020

cgcagacaaa gcctatggca gggatatcgt ggaggctcac taccgcgcct gcttgtatgc 1080

tggggtcaag attacaggaa caaatgctga ggtcatgcct gcccagtggg agttccaaat 1140

aggaccctgt gaaggaatcc acatgggaga tcatctctgg gtggcccgtt tcatcttgca 1200

tcgagtatgt gaggactttg gggtaatagc aacctttgac cccaagccca ttcctgggaa 1260

ctggaatggt gcaggctgcc ataccaactt tagcaccaag gccatgcggg aggagaatgg 1320

tctgaagcac atcgaggagg ccatcgagaa actaagcaag cggcaccagt accacattcg 1380

agcctacgat cccaaggggg gcctggacaa tgcccgtcgt ctgactgggt tccacgaaac 1440

gtccaacatc aacgactttt ctgctggtgt cgccaatcgc agtgccagca tccgcattcc 1500

ccggactgtc ggccaggaga agaaaggtta ctttgaagat cgccgcccct ctgccaattg 1560

tgacccttt gcagtgacag aagccatcgt ccgcacatgc cttctcaatg agactggcga 1620

cgagcccttc caatacaaaa actaatgact cgctttcttg ctgtccaatt tctattaaag 1680

gttcctttgt tccctaagtc caactactaa actgggggat attatgaagg gccttgagca 1740

tctggattct gcctaataaa aaacatttat tttcattgca atgatgtatt taaattattt 1800

ctgaatattt tactaaaaag ggaatgtggg aggtcagtgc atttaaaaca taaagaaaga 1860

agacac 1866

<210> 205
<211> 2785
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 205
aagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat ggccacctca gcaagttccc acttgaacaa aaacatcaag caaatgtact 720

tgtgcctgcc ccagggtgag aaagtccaag ccatgtatat ctgggttgat ggtactggag 780

aaggactgcg ctgcaaaacc cgcaccctgg actgtgagcc caagtgtgta gaagagttac 840

ctgagtggaa ttttgatggc tctagtacct ttcagtctga gggctccaac agtgacatgt 900

atctcagccc tgttgccatg tttcgggacc ccttccgcag agatcccaac aagctggtgt 960

tctgtgaagt tttcaagtac aaccggaagc ctgcagagac aaatttaagg cactcgtgta 1020

aacggataat ggacatggtg agcaaccagc acccctggtt tggaatggaa caggagtata 1080

ctctgatggg aacagatggg cacccttttg gttggccttc caatggcttt cctgggcccc 1140

aaggtccgta ttactgtggt gtgggcgcag acaaagccta tggcagggat atcgtggagg 1200

ctcactaccg cgcctgcttg tatgctgggg tcaagattac aggaacaaat gctgaggtca 1260

tgcctgccca gtgggagttc caaataggac cctgtgaagg aatccgcatg ggagatcatc 1320

tctgggtggc ccgtttcatc ttgcatcgag tatgtgagga ctttggggta atagcaacct 1380

ttgaccccaa gcccattcct gggaactgga atggtgcagg ctgccatacc aactttagca 1440

ccaaggccat gcgggaggag aatggtctga agcacatcga ggaggccatc gagaaactaa 1500

gcaagcggca caggtaccac attcgagcct acgatcccaa ggggggcctg gacaatgccc 1560

gtcgtctgac tgggttccac gaaacgtcca acatcaacga cttttctgct ggtgtcgcca 1620

atcgcagtgc cagcatccgc attccccgga ctgtcggcca ggagaagaaa ggttactttg 1680

aagatcgccg cccctctgcc aattgtgacc cctttgcagt gacagaagcc atcgtccgca 1740

catgccttct caatgagact ggcgacgagc ccttccaata caaaaactaa ttagactttg 1800

agtgatcttg agcctttcct agttcatccc accccgcccc agagagatct ttgtgaagga 1860

accttacttc tgtggtgtga cataattgga caaactacct acagagattt aaagctctaa 1920

ggtaaatata aaatttttaa gtgtataatg tgttaaacta ctgattctaa ttgtttgtgt 1980

attttagatt ccaacctatg gaactgatga atgggagcag tggtggaatg cctttaatga 2040

ggaaaacctg ttttgctcag aagaaatgcc atctagtgat gatgaggcta ctgctgactc 2100

tcaacattct actcctccaa aaaagaagag aaaggtagaa gatcccaagg actttccttc 2160

agaattgcta agtttttga gtcatgctgt gtttagtaat agaactcttg cttgctttgc 2220

tatttacacc acaaaggaaa aagctgcact gctatacaag aaaattatgg aaaaatattc 2280

tgtaaccttt ataagtaggc ataacagtta taatcataac atactgtttt ttcttactcc 2340

acacaggcat agagtgtctg ctattaataa ctatgctcaa aaattgtgta cctttagctt 2400

tttaatttgt aaaggggtta ataaggaata tttgatgtat agtgccttga ctagagatca 2460

taatcagcca taccacattt gtagaggttt tacttgcttt aaaaaacctc ccacacctcc 2520

ccctgaacct gaaacataaa atgaatgcaa ttgttgttgt taacttgttt attgcagctt 2580

ataatggtta caaataaagc aatagcatca caaatttcac aaataaagca ttttttttcac 2640

tgcattctag ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc tggatctagc 2700

ttcgtgtcaa ggacggtgac tgcagtgaat aataaaatgt gtgtttgtcc gaaatacgcg 2760

ttttgagatt tctcgaggaa gacat 2785

<210> 206
<211> 1971

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 206
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg acacaagaca 120

ggcttgcgcc accatggttg agaataccac tttatcccgc gtcagggaga ggcagtgcgt 180

aaaaagacgc ggaaccatgt gaaatactgg tttttagtgc gccagatctc tataatctcg 240

cgcaacctat tttcccctcg aacacttttt aagccgtaga taaacaggct gggacacttc 300

acatggccac ctcagcaagt tcccacttga acaaaaacat caagcaaatg tacctgtgcc 360

tgccccaggg tgagaaagtc caagccatgt atatctgggt tgatggtact ggagaaggac 420

tgcgctgcaa aacccgcacc ctggactgtg agcccaagtg tgtagaagag ttacctgagt 480

ggaattttga tggctctagt acctttcagt ctgagggctc caacagtgac atgtatctca 540

gccctgttgc catgtttcgg gaccccttcc gccgggagcc caacaagctg gtgttctgtg 600

aagttttcaa gtacaaccgg aagcctgcag agacaaattt aaggcactcc tgtaaacgga 660

taatggacat ggtgagcaac cagcacccct ggtttggaat ggaacaggag tatactctga 720

tgggaacaga tgggcaccct tttggttggc cttccaatgg ctttcctggg ccccaaggtc 780

cgtattactg tggtgtgggc gcagacaaag cctatggcag ggatatcgtg gaggctcact 840

accgcgcctg cttgtatgct ggggtcaaga ttacaggaac aaatgctgag gtcatgcctg 900

cccagtggga gttccaaata ggaccctgtg aaggaatcca catgggagat catctctggg 960

tggcccgttt catcttgcat cgagtatgtg aggactttgg ggtaatagca acctttgacc 1020

ccaagcccat tcctgggaac tggaatggtg caggctgcca taccaacttt agcaccaagg 1080

ccatgcggga ggagaatggt ctgaagcaca tcgaggaggc catcgagaaa ctaagcaagc 1140

ggcaccagta ccacattcga gcctacgatc ccaaggggg cctggacaat gcccgtcgtc 1200

tgactgggtt ccacgaaacg tccaacatca acgactttc tgctggtgtc gccaatcgca 1260

gtgccagcat ccgcattccc cggactgtcg gccaggagaa gaaaggttac tttgaagatc 1320

gccgcccctc tgccaattgt gacccctttg cagtgacaga agccatcgtc cgcacatgcc 1380

ttctcaatga gactggcgac gagcccttcc aatacaaaaa ctaataatta gactttgagt 1440

gatcttgagc ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc 1500

ttacttctgt ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt 1560

aaatataaaa tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt 1620

ttagattcca acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga 1680

aaacctgttt tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca 1740

acattctact cctctcgctt tcttgctgtc caatttctat taaaggttcc tttgttccct 1800

aagtccaact actaaactgg gggatattat gaagggcctt gagcatctgg attctgccta 1860

ataaaaaaca tttattttca ttgcaatgat gtatttaaat tatttctgaa tattttacta 1920

aaaagggaat gtgggaggtc agtgcattta aaacataaag aaagaagaca c 1971

<210> 207
<211> 2034
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 207
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg acacaagaca 120

ggcttgcgcc accatggttg agaataccac tttatcccgc gtcagggaga ggcagtgcgt 180

aaaaagacgc ggaaccatgt gaaatactgg tttttagtgc gccagatctc tataatctcg 240

cgcaacctat tttcccctcg aacacttttt aagccgtaga taaacaggct gggacacttc 300

acatggccac ctcagcaagt tcccacttga acaaaaacat caagcaaatg tacctgtgcc 360

tgccccaggg tgagaaagtc caagccatgt atatctgggt tgatggtact ggagaaggac 420

tgcgctgcaa aacccgcacc ctggactgtg agcccaagtg tgtagaagag ttacctgagt 480

ggaattttga tggctctagt acctttcagt ctgagggctc caacagtgac atgtatctca 540

gccctgttgc catgtttcgg gacccttcc gccgggagcc caacaagctg gtgttctgtg 600

aagttttcaa gtacaaccgg aagcctgcag agacaaattt aaggcactcc tgtaaacgga 660

taatggacat ggtgagcaac cagcacccct ggtttggaat ggaacaggag tatactctga 720

tgggaacaga tgggcaccct tttggttggc cttccaatgg ctttcctggg ccccaaggtc 780

cgtattactg tggtgtgggc gcagacaaag cctatggcag ggatatcgtg gaggctcact 840

accgcgcctg cttgtatgct ggggtcaaga ttacaggaac aaatgctgag gtcatgcctg 900

cccagtggga gttccaaata ggaccctgtg aaggaatcca catgggagat catctctggg 960

tggcccgttt catcttgcat cgagtatgtg aggactttgg ggtaatagca acctttgacc 1020

ccaagcccat tcctgggaac tggaatggtg caggctgcca taccaacttt agcaccaagg 1080

ccatgcggga ggagaatggt ctgaagcaca tcgaggaggc catcgagaaa ctaagcaagc 1140

ggcaccagta ccacattcga gcctacgatc ccaaggggg cctggacaat gcccgtcgtc 1200

tgactgggtt ccacgaaacg tccaacatca acgactttc tgctggtgtc gccaatcgca 1260

gtgccagcat ccgcattccc cggactgtcg gccaggagaa gaaaggttac tttgaagatc 1320

gccgcccctc tgccaattgt gacccctttg cagtgacaga agccatcgtc cgcacatgcc 1380

ttctcaatga gactggcgac gagcccttcc aatacaaaaa ctggatccgc tcagacatga 1440

taagatacat tgatgagttt ggacaaacca caactagaat gcagtgataa ttagactttg 1500

agtgatcttg agcctttcct agttcatccc accccgcccc agagagatct ttgtgaagga 1560

accttacttc tgtggtgtga cataattgga caaactacct acagagattt aaagctctaa 1620

ggtaaatata aaatttttaa gtgtataatg tgttaaacta ctgattctaa ttgtttgtgt 1680

attttagatt ccaacctatg gaactgatga atgggagcag tggtggaatg cctttaatga 1740

ggaaaacctg ttttgctcag aagaaatgcc atctagtgat gatgaggcta ctgctgactc 1800

tcaacattct actcctctcg ctttcttgct gtccaatttc tattaaaggt tcctttgttc 1860

cctaagtcca actactaaac tgggggatat tatgaagggc cttgagcatc tggattctgc 1920

ctaataaaaa acatttattt tcattgcaat gatgtattta aattatttct gaatatttta 1980

ctaaaaaggg aatgtgggag gtcagtgcat ttaaaacata aagaaagaag acac 2034

<210> 208
<211> 2337
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 208
tagtcttctt ggcgaaaaca cgcagatgca gtcggggcgg cgcggtccca ggtccacttc 60

gcatattaag gtgacgcgtg tggcctcgaa cacagagcga ctctgcaggg acacaagaca 120

ggcttgcgcc accatggttg agaataccac tttatcccgc gtcagggaga ggcagtgcgt 180

aaaaagacgc ggaaccatgt gaaatactgg tttttagtgc gccagatctc tataatctcg 240

cgcaacctat tttcccctcg aacacttttt aagccgtaga taaacaggct gggacacttc 300

acatggccac ctcagcaagt tcccacttga acaaaggcat caagcaaatg tacatgtccc 360

tgccccaggg tgagaaaatc caagccatgt atatctgggt tgatggtacc ggagaaggac 420

tgcgctgcaa gacccgtacc ctggactgtg accccaagtg tgtggaagag ttacctgagt 480

ggaactttga tggctctagt acctttcagt ctgaaggctc caacagcgac atgtacctcc 540

atcctgttgc catgtttcgg gaccccttcc gcaaagaccc caacaagctg gtgctatgtg 600

aagttttcaa gtataaccgg aagcctgcag aaaccaactt gaggcacatc tgtaaacgga 660

taatggacat ggtgagcaac cagcacccct ggtttggaat ggagcaggaa tatactctta 720

tgggaacaga cggccaccca tttggttggc cttccaatgg cttccctgga ccccaaggcc 780

cgtattactg cggtgtggga gcagacaagg cctacggcag ggacatcgtg gaggctcact 840

accgggcctg cttgtatgct ggagtcaaga tcacggggac aaatgcggag gttatgcctg 900

cccagtggga attccagata ggaccctgtg agggaatccg aatgggagat catctttgga 960

tagcccgttt tatcttgcat cgggtgtgcg aagattttgg ggtgatagca acctttgacc 1020

ccaagcccat tccagggaac tggaatggtg caggctgcca taccaacttc agcaccaagg 1080

ccatgcggga ggagaatggt ctgaagtgca ttgaggaggc cattgacaaa ctgagcaaga 1140

ggcaccagta ccacatccgc gcctacgatc ccaaggggggg cctggacaac gcccggcgtc 1200

tgactggatt ccacgaaacc tccaacatca acgacttttc tgccggtgtt gccaaccgct 1260

ccgccagtat ccgcattccc cggactgtcg gccaggagaa gaagggctac tttgaggacc 1320

gtcggccttc tgccaattgt gacccctatg cggtgacaga agccatcgtc cgcacgtgtc 1380

tcctcaacga aacaggcgac gaacccttcc aatacaagaa ctaataatta gactttgagt 1440

gatcttgagc ctttcctagt tcatcccacc ccgccccaga gagatctttg tgaaggaacc 1500

ttacttctgt ggtgtgacat aattggacaa actacctaca gagatttaaa gctctaaggt 1560

aaatataaaa tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt 1620

ttagattcca acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga 1680

aaacctgttt tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca 1740

acattctact cctccaaaaa agaagagaaa ggtagaagat cccaaggact ttccttcaga 1800

attgctaagt tttttgagtc atgctgtgtt tagtaataga actcttgctt gctttgctat 1860

ttacaccaca aaggaaaaag ctgcactgct atacaagaaa attatggaaa aatattctgt 1920

aacctttata agtaggcata acagttataa tcataacata ctgtttttc ttactccaca 1980

caggcataga gtgtctgcta ttaataacta tgctcaaaaa ttgtgtacct ttagcttttt 2040

aatttgtaaa ggggttaata aggaatattt gatgtatagt gccttgacta gagatcataa 2100

tcagccatac cacatttgta gaggttttac ttgctttaaa aaacctccca cacctccccc 2160

tgaacctgaa acataaaatg aatgcaattg ttgttgttaa cttgtttatt gcagcttata 2220

atggttacaa ataaagcaat agcatcacaa atttcacaaa taaagcattt ttttcactgc 2280

attctagttg tggtttgtcc aaactcatca atgtatctta tcatgtctgg aagacac 2337

<210> 209
<211> 1586
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 209
accggtcagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg tgtccccgga 60

agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca gcgtcttgtc 120

attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac ttcgcatatt 180

aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg gccacctcag 240

caagttccca cttgaacaaa aacatcaagc aaatgtactt gtgcctgccc cagggtgaga 300

aagtccaagc catgtatatc tgggttgatg gtactggaga aggactgcgc tgcaaaaccc 360

gcaccctgga ctgtgagccc aagtgtgtag aagagttacc tgagtggaat tttgatggct 420

ctagtacctt tcagtctgag ggctccaaca gtgacatgta tctcagccct gttgccatgt 480

ttcgggaccc cttccgcaga gatcccaaca agctggtgtt ctgtgaagtt ttcaagtaca 540

accggaagcc tgcagagaca aatttaaggc actcgtgtaa acggataatg gacatggtga 600

gcaaccagca cccctggttt ggaatggaac aggagtatac tctgatggga acagatgggc 660

acccttttgg ttggccttcc aatggctttc ctgggcccca aggtccgtat tactgtggtg 720

tgggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc gcctgcttgt 780

atgctggggt caagattaca ggaacaaatg ctgaggtcat gcctgcccag tgggagttcc 840

aaataggacc ctgtgaagga atccgcatgg gagatcatct ctgggtggcc cgtttcatct 900

tgcatcgagt atgtgaggac tttggggtaa tagcaacctt tgaccccaag cccattcctg 960

ggaactggaa tggtgcaggc tgccatacca actttagcac caaggccatg cgggaggaga 1020

atggtctgaa gcacatcgag gaggccatcg agaaactaag caagcggcac aggtaccaca 1080

ttcgagccta cgatcccaag gggggcctgg acaatgcccg tcgtctgact gggttccacg 1140

aaacgtccaa catcaacgac ttttctgctg gtgtcgccaa tcgcagtgcc agcatccgca 1200

ttccccggac tgtcggccag gagaagaaag gttactttga agatcgccgc ccctctgcca 1260

attgtgaccc ctttgcagtg acagaagcca tcgtccgcac atgccttctc aatgagactg 1320

gcgacgagcc cttccaatac aaaaactgga tccgctcaga catgataaga tacattgatg 1380

agtttggaca aaccacaact agaatgcagt gaaaaaaatg ctttatttgt gaaatttgtg 1440

atgctattgc tttatttgta accattataa gctgcaataa acaagttaac aacaacaatt 1500

gcattcattt tatgtttcag gttcaggggg aggtgtggga ggtttttaa agcaagtaaa 1560

acctctacaa atgtggtaat ttaaat 1586

<210> 210
<211> 1592
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 210
gtaagcaggt taccacattt gtagaggttt tacttgcttt aaaaaacctc ccacacctcc 60

ccctgaacct gaaacataaa atgaatgcaa ttgttgttgt taacttgttt attgcagctt 120

ataatggtta caaataaagc aatagcatca caaatttcac aaataaagca ttttttttcac 180

tgcattctag ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc tgagcggatc 240

cagtttttgt attggaaggg ctcgtcgcca gtctcattga gaaggcatgt gcggacgatg 300

gcttctgtca ctgcaaaggg gtcacaattg gcagaggggc ggcgatcttc aaagtaacct 360

ttcttctcct ggccgacagt ccggggaatg cggatgctgg cactgcgatt ggcgacacca 420

gcagaaaagt cgttgatgtt ggacgtttcg tggaacccag tcagacgacg ggcattgtcc 480

aggcccccct tgggatcgta ggctcgaatg tggtacctgt gccgcttgct tagtttctcg 540

atggcctcct cgatgtgctt cagaccattc tcctcccgca tggccttggt gctaaagttg 600

gtatggcagc ctgcaccatt ccagttccca ggaatgggct tggggtcaaa ggttgctatt 660

accccaaagt cctcacatac tcgatgcaag atgaaacggg ccacccagag atgatctccc 720

atgcggattc cttcacaggg tcctatttgg aactcccact gggcaggcat gacctcagca 780

tttgttcctg taatcttgac cccagcatac aagcaggcgc ggtagtgagc ctccacgata 840

tccctgccat aggctttgtc tgcgcccaca ccacagtaat acggaccttg gggcccagga 900

aagccattgg aaggccaacc aaaagggtgc ccatctgttc ccatcagagt atactcctgt 960

tccattccaa accaggggtg ctggttgctc accatgtcca ttatccgttt acacgagtgc 1020

cttaaatttg tctctgcagg cttccggttg tacttgaaaa cttcacagaa caccagcttg 1080

ttgggatctc tgcggaaggg gtcccgaaac atggcaacag ggctgagata catgtcactg 1140

ttggagccct cagactgaaa ggtactagag ccatcaaaat tccactcagg taactcttct 1200

acacacttgg gctcacagtc cagggtgcgg gttttgcagc gcagtccttc tccagtacca 1260

tcaacccaga tatacatggc ttggactttc tcaccctggg gcaggcacaa gtacatttgc 1320

ttgatgtttt tgttcaagtg ggaacttgct gaggtggcca tgccaccctg cagagtcgct 1380

ctgtgttcga ggccacacgc gtcaccttaa tatgcgaagt ggacctggga ccgcgccgcc 1440

ccgactgcat ctgcgtgttt tcgccaatga caagacgctg ggcggggttt gtgtcatcat 1500

agaactaaag acatgcaaat atatttcttc cggggacacc gccagcaaac gcgagcaacg 1560

ggccacgggg atgaagcagc tgacctgcta ta 1592

<210> 211
<211> 2030
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 211
aagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat ggccacctca gcaagttccc acttgaacaa aaacatcaag caaatgtact 720

tgtgcctgcc ccagggtgag aaagtccaag ccatgtatat ctgggttgat ggtactggag 780

aaggactgcg ctgcaaaacc cgcaccctgg actgtgagcc caagtgtgta gaagagttac 840

ctgagtggaa ttttgatggc tctagtacct ttcagtctga gggctccaac agtgacatgt 900

atctcagccc tgttgccatg tttcgggacc ccttccgcag agatcccaac aagctggtgt 960

tctgtgaagt tttcaagtac aaccggaagc ctgcagagac aaatttaagg cactcgtgta 1020

aacggataat ggacatggtg agcaaccagc acccctggtt tggaatggaa caggagtata 1080

ctctgatggg aacagatggg cacccttttg gttggccttc caatggcttt cctgggcccc 1140

aaggtccgta ttactgtggt gtgggcgcag acaaagccta tggcagggat atcgtggagg 1200

ctcactaccg cgcctgcttg tatgctgggg tcaagattac aggaacaaat gctgaggtca 1260

tgcctgccca gtgggagttc caaataggac cctgtgaagg aatccgcatg ggagatcatc 1320

tctgggtggc ccgtttcatc ttgcatcgag tatgtgagga ctttggggta atagcaacct 1380

ttgaccccaa gcccattcct gggaactgga atggtgcagg ctgccatacc aactttagca 1440

ccaaggccat gcgggaggag aatggtctga agcacatcga ggaggccatc gagaaactaa 1500

gcaagcggca caggtaccac attcgagcct acgatcccaa ggggggcctg gacaatgccc 1560

gtcgtctgac tgggttccac gaaacgtcca acatcaacga cttttctgct ggtgtcgcca 1620

atcgcagtgc cagcatccgc attccccgga ctgtcggcca ggagaagaaa ggttactttg 1680

aagatcgccg cccctctgcc aattgtgacc cctttgcagt gacagaagcc atcgtccgca 1740

catgccttct caatgagact ggcgacgagc ccttccaata caaaaactaa tggatccgct 1800

cagacatgat aagatacatt gatgagtttg gacaaaccac aactagaatg cagtgaaaaa 1860

aatgctttat ttgtgaaatt tgtgatgcta ttgctttatt tgtaaccatt ataagctgca 1920

ataaacaagt taacaacaac aattgcattc attttatgtt tcaggttcag ggggaggtgt 1980

gggaggtttt ttaaagcaag taaaacctct acaaatgtgg tagaagacaa 2030

<210> 212
<211> 1875
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 212
gtgtcttctt tctttatgtt ttaaatgcac tgacctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtc attagttttt gtattggaag 240

ggctcgtcgc cagtctcatt gagaaggcat gtgcggacga tggcttctgt cactgcaaag 300

gggtcacaat tggcagaggg gcggcgatct tcaaagtaac ctttcttctc ctggccgaca 360

gtccggggaa tgcggatgct ggcactgcga ttggcgacac cagcagaaaa gtcgttgatg 420

ttggacgttt cgtggaaccc agtcagacga cgggcattgt ccaggccccc cttgggatcg 480

taggctcgaa tgtggtactg gtgccgcttg cttagtttct cgatggcctc ctcgatgtgc 540

ttcagaccat tctcctcccg catggccttg gtgctaaagt tggtatggca gcctgcacca 600

ttccagttcc caggaatggg cttggggtca aaggttgcta ttaccccaaa gtcctcacat 660

actcgatgca agatgaaacg ggccacccag agatgatctc ccatgtggat tccttcacag 720

ggtcctattt ggaactccca ctgggcaggc atgacctcag catttgttcc tgtaatcttg 780

accccagcat acaagcaggc gcggtagtga gcctccacga tatccctgcc ataggctttg 840

tctgcgccca caccacagta atacggacct tggggcccag gaaagccatt ggaaggccaa 900

ccaaaagggt gcccatctgt tcccatcaga gtatactcct gttccattcc aaaccagggg 960

tgctggttgc tcaccatgtc cattatccgt ttacaggagt gccttaaatt tgtctctgca 1020

ggcttccggt tgtacttgaa aacttcacag aacaccagct tgttgggctc ccggcggaag 1080

gggtcccgaa acatggcaac agggctgaga tacatgtcac tgttggagcc ctcagactga 1140

aaggtactag agccatcaaa attccactca ggtaactctt ctacacactt gggctcacag 1200

tccagggtgc gggttttgca gcgcagtcct tctccagtac catcaaccca gatatacatg 1260

gcttggactt tctcaccctg gggcaggcac aggtacattt gcttgatgtt tttgttcaag 1320

tgggaacttg ctgaggtggc catggtggcg gacgaaaggc ccggagatga ggaagaggag 1380

aacagcgcgg cagacgtgcg cttttgaagc gtgcagaatg ccgggcctcc ggaggacctt 1440

cgggcgcccg ccccgccccc gagcccagaa agcgaaggag caaagctgct attggccgct 1500

gccccaaagg cctacccgct tccattgctc agcggtgctg tccatctgca cgagactagt 1560

gagtcgtgct acttccattt gtcacgtcct gcacgacgcg agctgcgggg cgggggggaa 1620

cttcctgact aggggaggag tagaaggtgg cgcgaagggg ccaccaaaga acggagccgg 1680

ttggcgccta ccggtggatg tggaatgtgt gcgaggccag aggccacttg tgtagcgcca 1740

agtgcccagc ggggctgcta aagcgcatgc tccagactgc cttgggaaaa gcgcctcccc 1800

tacccggtag agaaacttga tctgtcgccg caattcaaac ttcgtgaggc tccggtgccc 1860

gtcagtggaa gacta 1875

<210> 213
<211> 1926
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 213
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcatcagttt ttgtattgga 240

agggctcgtc gccagtctca ttgagaaggc atgtgcggac gatggcttct gtcactgcaa 300

aggggtcaca attggcagag gggcggcggt cttcaaagta acctttcttc tcctggccga 360

cagtccgggg aatgcggatg ctggcactgc gattggcgac accagcagaa aagtcgttga 420

tgttggacgt ttcgtggaac ccagtcagac gacgggcatt gtccaggccc cccttgggat 480

cgtaggctcg aatgtggtac cggtgccgct tgcttagttt ctcgatggcc tcctcgatgt 540

gcttcagacc attctcctcc cgcatggcct tggtgctaaa gttggtatgg cagcctgcac 600

cattccagtt cccaggaatg ggcttggggt caaaggttgc tattacccca aagtcttcac 660

atactcgatg caagatgaaa cgggccaccc agagatgatc tcccatgcgg attccttcac 720

agggtcctat ttggaactcc cactgggcag gcatgacctc agcatttgtt cctgtaatct 780

tgaccccagc atacaagcag gcgcggtagt gagcctccac gatatccctg ccataggctt 840

tgtctgcgcc cacaccacag taatacggac cttggggccc aggaaagcca ttggaaggcc 900

aaccaaaagg gtgcccatct gttcccatca gagtatactc ctgttccatt ccaaaccagg 960

ggtgctggtt gctcaccatg tccattatcc gtttacacga gtgccttaaa tttgtctctg 1020

caggcttccg gttgtacttg aaaacttcac agaacaccag cttgttggga tctctgcgga 1080

aggggtcccg aaacatggca acagggctga gatacatgtc actgttggag ccctcagact 1140

gaaaggtact agagccatca aaattccact caggtaactc ttctacacac ttgggctcac 1200

agtccagggt gcgggttttg cagcgcagtc cttctccagt accatcaacc cagatataca 1260

tggcttggac tttctcaccc tggggcaggc acaagtacat ttgcttgatg tttttgttca 1320

agtgggaact tgctgaggtg gccatggtgg cggacgaaag gcccggagat gaggaagagg 1380

agaacagcgc ggcagacgtg cgcttttgaa gcgtgcagaa tgccgggcct ccggaggacc 1440

ttcgggcgcc cgccccgccc ctgagcccgc ccctgagccc gcccccggac ccacccccttc 1500

ccagcctctg agcccagaaa gcgaaggagc aaagctgcta ttggccgctg ccccaaaggc 1560

ctacccgctt ccattgctca gcggtgctgt ccatctgcac gagactagtg agtcgtgcta 1620

cttccatttg tcacgtcctg cacgacgcga gctgcggggc gggggggaac ttcctgacta 1680

ggggaggagt agaaggtggc gcgaaggggc caccaaagaa cggagccggt tggcgcctac 1740

cggtggatgt ggaatgtgtg cgaggccaga ggccacttgt gtagcgccaa gtgcccagcg 1800

gggctgctaa agcgcatgct ccagactgcc ttgggaaaag cgcctcccct acccggtaga 1860

gaaacttgat ctgtcgccgc aattcaaact tcgtgaggct ccggtgcccg tcagtgacct 1920

gctata 1926

<210> 214
<211> 1926
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 214
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcatcagttt ttgtattgga 240

agggctcgtc gccagtctca ttgagaaggc atgtgcggac gatggcttct gtcactgcaa 300

aggggtcaca attggcagag gggcggcgat cttcaaagta acctttcttc tcctggccga 360

cagtccgggg aatgcggatg ctggcactgc gattggcgac accagcagaa aagtcgttga 420

tgttggacgt ttcgtggaac ccagtcagac gacgggcatt gtccaggccc cccttgggat 480

cgtaggctcg aatgtggtac cggtgccgct tgcttagttt ctcgatggcc tcctcgatgt 540

gcttcagacc attctcctcc cgcatggcct tggtgctaaa gttggtatgg cagcctgcac 600

cattccagtt cccaggaatg ggcttggggt caaaggttgc tattacccca aagtcctcac 660

atactcgatg caagatgaaa cgggccaccc agagatgatc tcccatgcgg attccttcac 720

agggtcctat ttggaactcc cactgggcag gcatgacctc agcatttgtt cctgtaatct 780

tgaccccagc atacaagcag gcgcggtagt gagcctccac gatatccctg ccataggctt 840

tgtctgcgcc cacaccacag taatacggac cttggggccc aggaaagcca ttggaaggcc 900

aaccaaaagg gtgcccatct gttcccatca gagtatactc ctgttccatt ccaaaccagg 960

ggtgctggtt gctcaccatg tccattatcc gtttacacga gtgccttaaa tttgtctctg 1020

caggcttccg gttgtacttg aaaacttcac agaacaccag cttgttggga tctctgcgga 1080

aggggtcccg aaacatggca acagggctga gatacatgtc actgttggag ccctcagact 1140

gaaaggtact agagccatca aaattccact caggtaactc ttctacacac ttgggctcac 1200

agtccagggt gcgggttttg cagcgcagtc cttctccagt accatcaacc cagatataca 1260

tggcttggac tttctcaccc tggggcaggc acaagtacat ttgcttgatg tttttgttca 1320

agtgggaact tgctgaggtg gccatggtgg cggacgaaag gcccggagat gaggaagagg 1380

agaacagcgc ggcagacgtg cgcttttgaa gcgtgcagaa tgccgggcct ccggaggacc 1440

ttcgggcgcc cgccccgccc ctgagcccgc ccctgagccc gcccccggac ccaccccttc 1500

ccagcctctg agcccagaaa gcgaaggagc aaagctgcta ttggccgctg ccccaaaggc 1560

ctacccgctt ccattgctca gcggtgctgt ccatctgcac gagactagtg agtcgtgcta 1620

cttccatttg tcacgtcctg cacgacgcga gctgcggggc gggggggaac ttcctgacta 1680

ggggaggagt agaaggtggc gcgaaggggc caccaaagaa cggagccggt tggcgcctac 1740

cggtggatgt ggaatgtgtg cgaggccaga ggccacttgt gtagcgccaa gtgcccagcg 1800

gggctgctaa agcgcatgct ccagactgcc ttgggaaaag cgcctcccct acccggtaga 1860

gaaacttgat ctgtcgccgc aattcaaact tcgtgaggct ccggtgcccg tcagtgacct 1920

gctata 1926

<210> 215
<211> 678
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 215
agtgacatgt atctcagccc tgttgccatg tttcgggacc ccttccgccg ggagcccaac 60

aagctggtgt tctgtgaagt tttcaagtac aaccggaagc ctgcagagac aaatttaagg 120

cactcctgta aacggataat ggacatggtg agcaaccagc acccctggtt tggaatggaa 180

caggagtata ctctgatggg aacagatggg cacccttttg gttggccttc caatggcttt 240

cctgggcccc aaggtccgta ttactgtggt gtgggcgcag acaaagccta tggcagggat 300

atcgtggagg ctcactaccg cgcctgcttg tatgctgggg tcaagattac aggaacaaat 360

gctgaggtca tgcctgccca gtgggagttc caaataggac cctgtgaagg aatccacatg 420

ggagatcatc tctgggtggc ccgtttcatc ttgcatcgag tatgtgagga ctttggggta 480

atagcaacct ttgaccccaa gcccattcct gggaactgga atggtgcagg ctgccatacc 540

aactttagca ccaaggccat gcgggaggag aatggtctga agcacatcga ggaggccatc 600

gagaaactaa gcaagcggca ccagtaccac attcgagcct acgatcccaa ggggggcctg 660

gacaatgccc gtcgtctg 678

<210> 216
<211> 1535
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 216
aagtcttctt aattaatccc gcccctaact ccgcccagtt ccgcccattc tccgccccat 60

ggctgactaa ttttttttat ttatgcagag gccgaggccg cctcggcctc tgagctattc 120

cagaagtagt gaggaggctt ttttggaggt ataggctttt gcaaaatggc cacctcagca 180

agttcccact tgaacaaaaa catcaagcaa atgtacttgt gcctgcccca gggtgagaaa 240

gtccaagcca tgtatatctg ggttgatggt actggagaag gactgcgctg caaaacccgc 300

accctggact gtgagcccaa gtgtgtagaa gagttacctg agtggaattt tgatggctct 360

agtacctttc agtctgaggg ctccaacagt gacatgtatc tcagccctgt tgccatgttt 420

cgggacccct tccgcagaga tcccaacaag ctggtgttct gtgaagtttt caagtacaac 480

cggaagcctg cagagacaaa tttaaggcac tcgtgtaaac ggataatgga catggtgagc 540

aaccagcacc cctggtttgg aatggaacag gagtatactc tgatgggaac agatgggcac 600

ccttttggtt ggccttccaa tggctttcct gggccccaag gtccgtatta ctgtggtgtg 660

ggcgcagaca aagcctatgg cagggatatc gtggaggctc actaccgcgc ctgcttgtat 720

gctggggtca agattacagg aacaaatgct gaggtcatgc ctgcccagtg ggagttccaa 780

ataggaccct gtgaaggaat ccgcatggga gatcatctct gggtggcccg tttcatcttg 840

catcgagtat gtgaggactt tggggtaata gcaacctttg accccaagcc cattcctggg 900

aactggaatg gtgcaggctg ccataccaac tttagcacca aggccatgcg ggaggagaat 960

ggtctgaagc acatcgagga ggccatcgag aaactaagca agcggcacag gtaccacatt 1020

cgagcctacg atcccaaggg gggcctggac aatgcccgtc gtctgactgg gttccacgaa 1080

acgtccaaca tcaacgactt ttctgctggt gtcgccaatc gcagtgccag catccgcatt 1140

ccccggactg tcggccagga gaagaaaggt tactttgaag atcgccgccc ctctgccaat 1200

tgtgacccct ttgcagtgac agaagccatc gtccgcacat gccttctcaa tgagactggc 1260

gacgagccct tccaatacaa aaactaatgg atccgctcag acatgataag atacattgat 1320

gagtttggac aaaccacaac tagaatgcag tgaaaaaaat gctttatttg tgaaatttgt 1380

gatgctattg ctttatttgt aaccattata agctgcaata aacaagttaa caacaacaat 1440

tgcattcatt ttatgtttca ggttcagggg gaggtgtggg aggtttttta aagcaagtaa 1500

aacctctaca aatgtggtag gcgcgccgaa gacaa 1535

<210> 217
<211> 2449
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 217
accggtaagt ttccagagct ttcgaggaag gtttcttcaa ctcaaattca tccgcctgat 60

aattttctta tattttccta aagaaggaag agaagcgcat agaggagaag ggaaataatt 120

ttttaggagc ctttcttacg gctatgagga atttggggct cagttgaaaa gcctaaactg 180

cctctcggga ggttgggcgc ggcgaactac tttcagcggc gcacgcagac ggcgtctacg 240

tgaggggtga taagtgacgc aacactcgtt gcataaattt gcgctccgcc agcccggagc 300

atttaggggc ggttggcttt gttgggtgag cttgtttgtg tccctgtggg tggacgtggt 360

tggtgattgg caggatcctg gtatccgcta caggtactgg cccacagccg taaagagctg 420

cgggggcgtg agaggggggа atgggtgagg tcaagctgga ggcttcttgg ggttgggtgg 480

gccgctgagg ggaggggagg gcgaggtgac gcgacacccg gcctttctgg gagagtgggc 540

cttgttgacc taaggggggc gagggcagtt ggcacgcgca cgcgccgaca gaaactaaca 600

gacattaacc aacagcgatt ccgtcgcgtt tacttgggag gaaggcggaa aagaggtagt 660

ttgtgtggct tctggaaacc ctaaatttgg aatcccagta tgagaatggt gtcccttctt 720

gtgtttcaat gggattttta cttcgcgagt cttgtgggtt tggttttgtt ttcagtttgc 780

ctaacaccgt gcttaggttt gaggcagatt ggagttcggt cgggggagtt tgaatatccg 840

gaacagttag tggggaaagc tgtggacgct tggtaagaga gcgctctgga ttttccgctg 900

ttgacgttga aaccttgaat gacgaatttc gtattaagtg acttagcctt gtaaaattga 960

ggggaggctt gcggaatatt aacgtattta aggcattttg aaggaatagt tgctaatttt 1020

gaagaatatt aggtgtaaaa gcaagaaata caatgatcct gaggtgacac gcttatgttt 1080

tacttttaaa ctaggtcaaa atggccacct cagcaagttc ccacttgaac aaaaacatca 1140

agcaaatgta cttgtgcctg ccccagggtg agaaagtcca agccatgtat atctgggttg 1200

atggtactgg agaaggactg cgctgcaaaa cccgcaccct ggactgtgag cccaagtgtg 1260

tagaagagtt acctgagtgg aattttgatg gctctagtac ctttcagtct gagggctcca 1320

acagtgacat gtatctcagc cctgttgcca tgtttcggga ccccttccgc agagatccca 1380

acaagctggt gttctgtgaa gttttcaagt acaaccggaa gcctgcagag acaaatttaa 1440

ggcactcgtg taaacggata atggacatgg tgagcaacca gcacccctgg tttggaatgg 1500

aacaggagta tactctgatg ggaacagatg ggcacccttt tggttggcct tccaatggct 1560

ttcctgggcc ccaaggtccg tattactgtg gtgtgggcgc agacaaagcc tatggcaggg 1620

atatcgtgga ggctcactac cgcgcctgct tgtatgctgg ggtcaagatt acaggaacaa 1680

atgctgaggt catgcctgcc cagtgggagt tccaaatagg accctgtgaa ggaatccgca 1740

tgggagatca tctctgggtg gcccgtttca tcttgcatcg agtatgtgag gactttgggg 1800

taatagcaac ctttgacccc aagcccattc ctgggaactg gaatggtgca ggctgccata 1860

ccaactttag caccaaggcc atgcgggagg agaatggtct gaagcacatc gaggaggcca 1920

tcgagaaact aagcaagcgg cacaggtacc acattcgagc ctacgatccc aaggggggcc 1980

tggacaatgc ccgtcgtctg actgggttcc acgaaacgtc caacatcaac gacttttctg 2040

ctggtgtcgc caatcgcagt gccagcatcc gcattccccg gactgtcggc caggagaaga 2100

aaggttactt tgaagatcgc cgcccctctg ccaattgtga ccccttgca gtgacagaag 2160

ccatcgtccg cacatgcctt ctcaatgaga ctggcgacga gcccttccaa tacaaaaacc 2220

agacatgata agatacattg atgagtttgg acaaaccaca actagaatgc agtgaaaaaa 2280

atgctttatt tgtgaaattt gtgatgctat tgctttattt gtaaccatta taagctgcaa 2340

taaacaagtt aacaacaaca attgcattca ttttatgttt caggttcagg gggaggtgtg 2400

ggaggttttt taaagcaagt aaaacctcta caaatgtggt aatttaaat 2449

<210> 218
<211> 2455
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 218
gtaagcaggt taccacattt gtagaggttt tacttgcttt aaaaaacctc ccacacctcc 60

ccctgaacct gaaacataaa atgaatgcaa ttgttgttgt taacttgttt attgcagctt 120

ataatggtta caaataaagc aatagcatca caaatttcac aaataaagca ttttttttcac 180

tgcattctag ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc tggtttttgt 240

attggaaggg ctcgtcgcca gtctcattga gaaggcatgt gcggacgatg gcttctgtca 300

ctgcaaaggg gtcacaattg gcagaggggc ggcgatcttc aaagtaacct ttcttctcct 360

ggccgacagt ccggggaatg cggatgctgg cactgcgatt ggcgacacca gcagaaaagt 420

cgttgatgtt ggacgtttcg tggaacccag tcagacgacg ggcattgtcc aggcccccct 480

tgggatcgta ggctcgaatg tggtacctgt gccgcttgct tagtttctcg atggcctcct 540

cgatgtgctt cagaccattc tcctcccgca tggccttggt gctaaagttg gtatggcagc 600

ctgcaccatt ccagttccca ggaatgggct tggggtcaaa ggttgctatt accccaaagt 660

cctcacatac tcgatgcaag atgaaacggg ccacccagag atgatctccc atgcggattc 720

cttcacaggg tcctatttgg aactcccact gggcaggcat gacctcagca tttgttcctg 780

taatcttgac cccagcatac aagcaggcgc ggtagtgagc ctccacgata tccctgccat 840

aggctttgtc tgcgcccaca ccacagtaat acggaccttg gggcccagga aagccattgg 900

aaggccaacc aaaagggtgc ccatctgttc ccatcagagt atactcctgt tccattccaa 960

accaggggtg ctggttgctc accatgtcca ttatccgttt acacgagtgc cttaaatttg 1020

tctctgcagg cttccggttg tacttgaaaa cttcacagaa caccagcttg ttgggatctc 1080

tgcggaaggg gtcccgaaac atggcaacag ggctgagata catgtcactg ttggagccct 1140

cagactgaaa ggtactagag ccatcaaaat tccactcagg taactcttct acacacttgg 1200

gctcacagtc cagggtgcgg gttttgcagc gcagtccttc tccagtacca tcaacccaga 1260

tatacatggc ttggactttc tcaccctggg gcaggcacaa gtacatttgc ttgatgtttt 1320

tgttcaagtg ggaacttgct gaggtggcca ttttgaccta gtttaaaagt aaaacataag 1380

cgtgtcacct caggatcatt gtatttcttg cttttacacc taatattctt caaaattagc 1440

aactattcct tcaaaatgcc ttaaatacgt taatattccg caagcctccc ctcaatttta 1500

caaggctaag tcacttaata cgaaattcgt cattcaaggt ttcaacgtca acagcggaaa 1560

atccagagcg ctctcttacc aagcgtccac agctttcccc actaactgtt ccggatattc 1620

aaactccccc gaccgaactc caatctgcct caaacctaag cacggtgtta ggcaaactga 1680

aaacaaaacc aaacccacaa gactcgcgaa gtaaaaatcc cattgaaaca caagaaggga 1740

caccattctc atactgggat tccaaattta gggtttccag aagccacaca aactacctct 1800

tttccgcctt cctcccaagt aaacgcgacg gaatcgctgt tggttaatgt ctgttagttt 1860

ctgtcggcgc gtgcgcgtgc caactgccct cgccccccct aggtcaacaa ggcccactct 1920

cccagaaagg ccgggtgtcg cgtcacctcg ccctcccctc ccctcagcgg cccacccaac 1980

cccaagaagc ctccagcttg acctcaccca ttcccccctc tcacgccccc gcagctcttt 2040

acggctgtgg gccagtacct gtagcggata ccaggatcct gccaatcacc aaccacgtcc 2100

acccacaggg acacaaacaa gctcacccaa caaagccaac cgcccctaaa tgctccgggc 2160

tggcggagcg caaatttatg caacgagtgt tgcgtcactt atcacccctc acgtagacgc 2220

cgtctgcgtg cgccgctgaa agtagttcgc cgcgcccaac ctcccgagag gcagtttagg 2280

cttttcaact gagccccaaa ttcctcatag ccgtaagaaa ggctcctaaa aaattatttc 2340

ccttctcctc tatgcgcttc tcttccttct ttaggaaaat ataagaaaat tatcaggcgg 2400

atgaatttga gttgaagaaa ccttcctcga aagctctgga aacttacctg ctata 2455

<210> 219
<211> 2206
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 219
aagtcttctt aattaatccc gcccctaact ccgcccagtt ccgcccattc tccgccccat 60

ggctgactaa ttttttttat ttatgcagag gccgaggccg cctcggcctc tgagctattc 120

cagaagtagt gaggaggctt ttttggaggt ataggctttt gcaaaatggc cacctcagca 180

agttcccact tgaacaaaaa catcaagcaa atgtacttgt gcctgcccca gggtgagaaa 240

gtccaagcca tgtatatctg ggttgatggt actggagaag gactgcgctg caaaacccgc 300

accctggact gtgagcccaa gtgtgtagaa gagttacctg agtggaattt tgatggctct 360

agtacctttc agtctgaggg ctccaacagt gacatgtatc tcagccctgt tgccatgttt 420

cgggacccct tccgcagaga tcccaacaag ctggtgttct gtgaagtttt caagtacaac 480

cggaagcctg cagagacaaa tttaaggcac tcgtgtaaac ggataatgga catggtgagc 540

aaccagcacc cctggtttgg aatggaacag gagtatactc tgatgggaac agatgggcac 600

ccttttggtt ggccttccaa tggctttcct gggccccaag gtccgtatta ctgtggtgtg 660

ggcgcagaca aagcctatgg cagggatatc gtggaggctc actaccgcgc ctgcttgtat 720

gctggggtca agattacagg aacaaatgct gaggtcatgc ctgcccagtg ggagttccaa 780

ataggaccct gtgaaggaat ccgcatggga gatcatctct gggtggcccg tttcatcttg 840

catcgagtat gtgaggactt tggggtaata gcaacctttg accccaagcc cattcctggg 900

aactggaatg gtgcaggctg ccataccaac tttagcacca aggccatgcg ggaggagaat 960

ggtctgaagc acatcgagga ggccatcgag aaactaagca agcggcacag gtaccacatt 1020

cgagcctacg atcccaaggg gggcctggac aatgcccgtc gtctgactgg gttccacgaa 1080

acgtccaaca tcaacgactt ttctgctggt gtcgccaatc gcagtgccag catccgcatt 1140

ccccggactg tcggccagga gaagaaaggt tactttgaag atcgccgccc ctctgccaat 1200

tgtgacccct ttgcagtgac agaagccatc gtccgcacat gccttctcaa tgagactggc 1260

gacgagccct tccaatacaa aaactaatta gactttgagt gatcttgagc ctttcctagt 1320

tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt ggtgtgacat 1380

aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa tttttaagtg 1440

tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca acctatggaa 1500

ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt tgctcagaag 1560

aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact cctccaaaaa 1620

agaagagaaa ggtagaagat cccaaggact ttccttcaga attgctaagt tttttgagtc 1680

atgctgtgtt tagtaataga actcttgctt gctttgctat ttacaccaca aaggaaaaag 1740

ctgcactgct atacaagaaa attatggaaa aatattctgt aacctttata agtaggcata 1800

acagttataa tcataacata ctgtttttttc ttactccaca caggcataga gtgtctgcta 1860

ttaataacta tgctcaaaaa ttgtgtacct ttagcttttt aatttgtaaa ggggttaata 1920

aggaatattt gatgtatagt gccttgacta gagatcataa tcagccatac cacatttgta 1980

gaggttttac ttgctttaaa aaacctccca cacctccccc tgaacctgaa acataaaatg 2040

aatgcaattg ttgttgttaa cttgtttatt gcagcttata atggttacaa ataaagcaat 2100

agcatcacaa atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc 2160

aaactcatca atgtatctta tcatgtctgg ggcgcgccga agacaa 2206

<210> 220
<211> 2366
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 220
tagtcttcgt tccgcccatt ctccgcccca tggctgacta attttttta tttatgcaga 60

ggccgaggcc gcctcggcct ctgagctatt ccagaagtag tgaggaggct tttttggagg 120

cctaggcttt tgcaaaggac acaagacagg cttgcgccac catggttgag aataccactt 180

tatcccgcgt cagggagagg cagtgcgtaa aaagacgcgg aaccatgtga aatactggtt 240

tttagtgcgc cagatctcta taatctcgcg caacctattt tcccctcgaa cacttttaa 300

gccgtagata aacaggctgg gacacttcac atggccacct cagcaagttc ccacttgaac 360

aaaaacatca agcaaatgta cctgtgcctg ccccagggtg agaaagtcca agccatgtat 420

atctgggttg atggtactgg agaaggactg cgctgcaaaa cccgcaccct ggactgtgag 480

cccaagtgtg tagaagagtt acctgagtgg aattttgatg gctctagtac ctttcagtct 540

gagggctcca acagtgacat gtatctcagc cctgttgcca tgtttcggga ccccttccgc 600

cgggagccca acaagctggt gttctgtgaa gttttcaagt acaaccggaa gcctgcagag 660

acaaatttaa ggcactcctg taaacggata atggacatgg tgagcaacca gcacccctgg 720

tttggaatgg aacaggagta tactctgatg ggaacagatg ggcacccttt tggttggcct 780

tccaatggct ttcctgggcc ccaaggtccg tattactgtg gtgtgggcgc agacaaagcc 840

tatggcaggg atatcgtgga ggctcactac cgcgcctgct tgtatgctgg ggtcaagatt 900

acaggaacaa atgctgaggt catgcctgcc cagtgggagt tccaaatagg accctgtgaa 960

ggaatccaca tgggagatca tctctgggtg gcccgtttca tcttgcatcg agtatgtgag 1020

gactttgggg taatagcaac ctttgacccc aagcccattc ctgggaactg gaatggtgca 1080

ggctgccata ccaactttag caccaaggcc atgcgggagg agaatggtct gaagcacatc 1140

gaggaggcca tcgagaaact aagcaagcgg caccagtacc acattcgagc ctacgatccc 1200

aaggggggcc tggacaatgc ccgtcgtctg actgggttcc acgaaacgtc caacatcaac 1260

gacttttctg ctggtgtcgc caatcgcagt gccagcatcc gcattccccg gactgtcggc 1320

caggagaaga aaggttactt tgaagatcgc cgcccctctg ccaattgtga ccccttgca 1380

gtgacagaag ccatcgtccg cacatgcctt ctcaatgaga ctggcgacga gcccttccaa 1440

tacaaaaact aataattaga ctttgagtga tcttgagcct ttcctagttc atcccacccc 1500

gccccagaga gatctttgtg aaggaacctt acttctgtgg tgtgacataa ttggacaaac 1560

tacctacaga gatttaaagc tctaaggtaa atataaaatt tttaagtgta taatgtgtta 1620

aactactgat tctaattgtt tgtgtatttt agattccaac ctatggaact gatgaatggg 1680

agcagtggtg gaatgccttt aatgaggaaa acctgttttg ctcagaagaa atgccatcta 1740

gtgatgatga ggctactgct gactctcaac attctactcc tccaaaaaag aagagaaagg 1800

tagaagatcc caaggacttt ccttcagaat tgctaagttt tttgagtcat gctgtgttta 1860

gtaatagaac tcttgcttgc tttgctattt acaccacaaa ggaaaaagct gcactgctat 1920

acaagaaaat tatggaaaaa tattctgtaa cctttataag taggcataac agttataatc 1980

ataacatact gtttttttctt actccacaca ggcatagagt gtctgctatt aataactatg 2040

ctcaaaaatt gtgtaccttt agctttttaa tttgtaaagg ggttaataag gaatatttga 2100

tgtatagtgc cttgactaga gatcataatc agccatacca catttgtaga ggttttactt 2160

gctttaaaaa acctcccaca cctccccctg aacctgaaac ataaaatgaa tgcaattgtt 2220

gttgttaact tgtttattgc agcttataat ggttacaaat aaagcaatag catcacaaat 2280

ttcacaaata aagcattttt ttcactgcat tctagttgtg gtttgtccaa actcatcaat 2340

gtatcttatc atgtctggga agacac 2366

<210> 221
<211> 2452
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 221
tagtcttcgt tccgcccatt ctccgcccca tggctgacta attttttta tttatgcaga 60

ggccgaggcc gcctcggcct ctgagctatt ccagaagtag tgaggaggct tttttggagg 120

cctaggcttt tgcaaaggac acaagacagg cttgcgccac catggttgag aataccactt 180

tatcccgcgt cagggagagg cagtgcgtaa aaagacgcgg aaccatgtga aatactggtt 240

tttagtgcgc cagatctcta taatctcgcg caacctattt tcccctcgaa cacttttaa 300

gccgtagata aacaggctgg gacacttcac atggccacct cagcaagttc ccacttgaac 360

aaaaacatca agcaaatgta cctgtgcctg ccccagggtg agaaagtcca agccatgtat 420

atctgggttg atggtactgg agaaggactg cgctgcaaaa cccgcaccct ggactgtgag 480

cccaagtgtg tagaagagtt acctgagtgg aattttgatg gctctagtac ctttcagtct 540

gagggctcca acagtgacat gtatctcagc cctgttgcca tgtttcggga ccccttccgc 600

cgggagccca acaagctggt gttctgtgaa gttttcaagt acaaccggaa gcctgcagag 660

acaaatttaa ggcactcctg taaacggata atggacatgg tgagcaacca gcacccctgg 720

tttggaatgg aacaggagta tactctgatg ggaacagatg ggcacccttt tggttggcct 780

tccaatggct ttcctgggcc ccaaggtccg tattactgtg gtgtgggcgc agacaaagcc 840

tatggcaggg atatcgtgga ggctcactac cgcgcctgct tgtatgctgg ggtcaagatt 900

acaggaacaa atgctgaggt catgcctgcc cagtgggagt tccaaatagg accctgtgaa 960

ggaatccaca tgggagatca tctctgggtg gcccgtttca tcttgcatcg agtatgtgag 1020

gactttgggg taatagcaac ctttgacccc aagcccattc ctgggaactg gaatggtgca 1080

ggctgccata ccaactttag caccaaggcc atgcgggagg agaatggtct gaagcacatc 1140

gaggaggcca tcgagaaact aagcaagcgg caccagtacc acattcgagc ctacgatccc 1200

aaggggggcc tggacaatgc ccgtcgtctg actgggttcc acgaaacgtc caacatcaac 1260

gacttttctg ctggtgtcgc caatcgcagt gccagcatcc gcattccccg gactgtcggc 1320

caggagaaga aaggttactt tgaagatcgc cgcccctctg ccaattgtga ccccttgca 1380

gtgacagaag ccatcgtccg cacatgcctt ctcaatgaga ctggcgacga gcccttccaa 1440

tacaaaaact ggatccgctc agacatgata agatacattg atgagtttgg acaaaccaca 1500

actagaatgc agtgataatt agactttgag tgatcttgag cctttcctag ttcatcccac 1560

cccgccccag agagatcttt gtgaaggaac cttacttctg tggtgtgaca taattggaca 1620

aactacctac agagatttaa agctctaagg taaatataaa atttttaagt gtataatgtg 1680

ttaaactact gattctaatt gtttgtgtat tttagattcc aacctatgga actgatgaat 1740

gggagcagtg gtggaatgcc tttaatgagg aaaacctgtt ttgctcagaa gaaatgccat 1800

ctagtgatga tgaggctact gctgactctc aacattctac tcctccaaaa aagaagagaa 1860

aggtagaaga tcccaaggac tttccttcag aattgctaag ttttttgagt catgctgtgt 1920

ttagtaatag aactcttgct tgctttgcta tttacaccac aaaggaaaaa gctgcactgc 1980

tatacaagaa aattatggaa aaatattctg taacctttat aagtaggcat aacagttata 2040

atcataacat actgtttttt cttactccac acaggcatag agtgtctgct attaataact 2100

atgctcaaaa attgtgtacc tttagctttt taatttgtaa aggggttaat aaggaatatt 2160

tgatgtatag tgccttgact agagatcata atcagccata ccacatttgt agaggtttta 2220

cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt 2280

gttgttgtta acttgtttat tgcagcttat aatggttaca ataaaagcaa tagcatcaca 2340

aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc caaactcatc 2400

aatgtatctt atcatgtctg ggaagacacc gtcaaaaggg cgacacaaaa tt 2452

<210> 222
<211> 1136
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 222
gttttcttta tgttttaaat gcactgacct cccacattcc ctttttagta aaatattcag 60

aaataattta aatacatcat tgcaatgaaa ataaatgttt tttattaggc agaatccaga 120

tgctcaaggc ccttcataat atcccccagt ttagtagttg gacttaggga acaaaggaac 180

ctttaataga aattggacag caagaaagcg agttattagc cctcccacac ataaccagag 240

ggcagcaatt cacgaatccc aactgccgtc ggctgtccat cactgtcctt cactatggct 300

ttgatcccag gatgcagatc gagaagcacc tgtcggcacc gtccgcaggg gctcaagatg 360

cccctgttct catttccgat cgcgacgata caagtcaggt tgccagctgc cgcagcagca 420

gcagtgccca gcaccacgag ttctgcacaa ggtcccccag taaaatgata tacattgaca 480

ccagtgaaga tgcggccgtc gctagagaga gctgcgctgg cgacgctgta atcttcagag 540

atggggatgc tgttgattgt agccgttgct ctttcaatga gggtggattc ttcttgagac 600

aaaggcttgg ccatggtggc gacgtgcgct ccggaggctt gcagaatgcg gaacaccgcg 660

cgggcaggaa cagggcccac actaccgccc cacaccccgc ctcccgcacc gccccttccc 720

ggccgctgct ctcagaaagc gaaggagcaa agctgctatt ggccgctgcc ccaaaggcct 780

acccgcttcc attgctcagc ggtgctgtcc atctgcacga gactagtgag tcgtgctact 840

tccatttgtc acgtcctgca cgacgcgagc tgcggggcgg gggggaactt cctgactagg 900

ggaggagtag aaggtggcgc gaaggggcca ccaaagaacg gagccggttg gcgcctaccg 960

gtggatgtgg aatgtgtgcg aggccagagg ccacttgtgt agcgccaagt gcccagcggg 1020

gctgctaaag cgcatgctcc agactgcctt gggaaaagcg cctcccctac ccggtagaga 1080

aacttgatct gtcgccgcaa ttcaaacttc gtgaggctcc ggtgcccgtc agtgta 1136

<210> 223
<211> 1055
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 223
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

ttagccctcc cacacataac cagagggcag caattcacga atcccaactg ccgtcggctg 300

tccatcactg tccttcacta tggctttgat cccaggatgc agatcgagaa gcacctgtcg 360

gcaccgtccg caggggctca agatgcccct gttctcattt ccgatcgcga cgatacaagt 420

caggttgcca gctgccgcag cagcagcagt gcccagcacc acgagttctg cacaaggtcc 480

cccagtaaaa tgatatacat tgacaccagt gaagatgcgg ccgtcgctag agagagctgc 540

gctggcgacg ctgtaatctt cagagatggg gatgctgttg attgtagccg ttgctctttc 600

aatgagggtg gattcttctt gagacaaagg cttggccatg tgaagtgtcc cagcctgttt 660

atctacggct taaaaagtgt tcgaggggaa aataggttgc gcgagattat agagatctgg 720

cgcactaaaa accagtattt cacatgagtc cgcgtctttt tacgcactgc ctctccctga 780

cgcgggataa agtggtattc tcaaacatat ctcgcaagcc tgtcttgtgt ccctgcagag 840

tcgctctgtg ttcgaggcca cacgcgtcac cttaatatgc gaagtggacc tgggaccgcg 900

ccgccccgac tgcatctgcg tgttttcgcc aatgacaaga cgctgggcgg ggtttgtgtc 960

atcatagaac taaagacatg caaatatatt tcttccgggg acaccgccag caaacgcgag 1020

caacgggcca cggggatgaa gcagctggaa gacta 1055

<210> 224
<211> 868
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 224
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

ttagccctcc cacacataac cagagggcag caattcacga atcccaactg ccgtcggctg 300

tccatcactg tccttcacta tggctttgat cccaggatgc agatcgagaa gcacctgtcg 360

gcaccgtccg caggggctca agatgcccct gttctcattt ccgatcgcga cgatacaagt 420

caggttgcca gctgccgcag cagcagcagt gcccagcacc acgagttctg cacaaggtcc 480

cccagtaaaa tgatatacat tgacaccagt gaagatgcgg ccgtcgctag agagagctgc 540

gctggcgacg ctgtaatctt cagagatggg gatgctgttg attgtagccg ttgctctttc 600

aatgagggtg gattcttctt gagacaaagg cttggccatg ccaccctgca gagtcgctct 660

gtgttcgagg ccacacgcgt caccttaata tgcgaagtgg acctgggacc gcgccgcccc 720

gactgcatct gcgtgttttc gccaatgaca agacgctggg cggggtttgt gtcatcatag 780

aactaaagac atgcaaatat atttcttccg gggacaccgc cagcaaacgc gagcaacggg 840

ccacggggat gaagcagctg gaagacta 868

<210> 225
<211> 1307
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 225
aagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat ggccaagcct ttgtctcaag aagaatccac cctcattgaa agagcaacgg 720

ctacaatcaa cagcatcccc atctctgaag attacagcgt cgccagcgca gctctctcta 780

gcgacggccg catcttcact ggtgtcaatg tatatcattt tactgggggga ccttgtgcag 840

aactcgtggt gctgggcact gctgctgctg cggcagctgg caacctgact tgtatcgtcg 900

cgatcggaaa tgagaacagg ggcatcttga gcccctgcgg acggtgccga caggtgcttc 960

tcgatctgca tcctgggatc aaagccatag tgaaggacag tgatggacag ccgacggcag 1020

ttgggattcg tgaattgctg ccctctggtt atgtgtggga gggctaatgg atccgctcag 1080

acatgataag atacattgat gagtttggac aaaccacaac tagaatgcag tgaaaaaaat 1140

gctttatttg tgaaatttgt gatgctattg ctttatttgt aaccattata agctgcaata 1200

aacaagttaa caacaacaat tgcattcatt ttatgtttca ggttcagggg gaggtgtggg 1260

aggtttttta aagcaagtaa aacctctaca aatgtggtag aagacaa 1307

<210> 226
<211> 1200
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 226
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag ttagccctcc cacacataac 240

cagagggcag caattcacga atcccaactg ccgtcggctg tccatcactg tccttcacta 300

tggctttgat cccaggatgc agatcgagaa gcacctgtcg gcaccgtccg caggggctca 360

agatgcccct gttctcattt ccgatcgcga cgatacaagt caggttgcca gctgccgcag 420

cagcagcagt gcccagcacc acgagttctg cacaaggtcc cccagtaaaa tgatatacat 480

tgacaccagt gaagatgcgg ccgtcgctag agagagctgc gctggcgacg ctgtaatctt 540

cagagatggg gatgctgttg attgtagccg ttgctctttc aatgagggtg gattcttctt 600

gagacaaagg cttggccatg gtggcggacg aaaggcccgg agatgaggaa gaggagaaca 660

gcgcggcaga cgtgcgcttt tgaagcgtgc agaatgccgg gcctccggag gaccttcggg 720

cgcccgcccc gcccctgagc ccgcccctga gcccgccccc ggacccaccc cttcccagcc 780

tctgagccca gaaagcgaag gagcaaagct gctattggcc gctgccccaa aggcctaccc 840

gcttccattg ctcagcggtg ctgtccatct gcacgagact agtgagtcgt gctacttcca 900

tttgtcacgt cctgcacgac gcgagctgcg gggcgggggg gaacttcctg actaggggag 960

gagtagaagg tggcgcgaag gggccaccaa agaacggagc cggttggcgc ctaccggtgg 1020

atgtggaatg tgtgcgaggc cagaggccac ttgtgtagcg ccaagtgccc agcggggctg 1080

ctaaagcgca tgctccagac tgccttggga aaagcgcctc ccctacccgg tagagaaact 1140

tgatctgtcg ccgcaattca agcttcgtga ggctccggtg cccgtcagtg acctgctata 1200

<210> 227
<211> 1145
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 227
gtgtcttctt tctttatgtt ttaaatgcac tgatctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtt agccctccca cacataacca 240

gagggcagca attcacgaat cccaactgcc gtcggctgtc catcactgtc cttcactatg 300

gctttgatcc caggatgcag atcgagaagc acctgtcggc accgtccgca ggggctcaag 360

atgcccctgt tctcatttcc gatcgcgacg atacaagtca ggttgccagc tgccgcagca 420

gcagcagtgc ccagcaccac gagttctgca caaggtcccc cagtaaaatg atatacattg 480

acaccagtga agatgcggcc gtcgctagag agagctgcgc tggcgacgct gtaatcttca 540

gagatgggga tgctgttgat tgtagccgtt gctctttcaa tgagggtgga ttcttcttga 600

gacaaaggct tggccatggt ggcgacgtgc gctccggagg cttgcagaat gcggaacacc 660

gcgcgggcag gaacagggcc cacactaccg ccccacaccc cgcctcccgc accgcccctt 720

cccggccgct gctctcagaa agcgaaggag caaagctgct attggccgct gccccaaagg 780

cctacccgct tccattgctc agcggtgctg tccatctgca cgagactagt gagtcgtgct 840

acttccattt gtcacgtcct gcacgacgcg agctgcgggg cgggggggaa cttcctgact 900

aggggaggag tagaaggtgg cgcgaagggg ccaccaaaga acggagccgg ttggcgccta 960

ccggtggatg tggaatgtgt gcgaggccag aggccacttg tgtagcgcca agtgcccagc 1020

ggggctgcta aagcgcatgc tccagactgc cttgggaaaa gcgcctcccc tacccggtag 1080

agaaacttga tctgtcgccg caattcaaac ttcgtgaggc tccggtgccc gtcagtggaa 1140

gacta 1145

<210> 228
<211> 812
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 228
aagtcttctt aattaatccc gcccctaact ccgcccagtt ccgcccattc tccgccccat 60

ggctgactaa ttttttttat ttatgcagag gccgaggccg cctcggcctc tgagctattc 120

cagaagtagt gaggaggctt ttttggaggt ataggctttt gcaaaatggc caagcctttg 180

tctcaagaag aatccaccct cattgaaaga gcaacggcta caatcaacag catccccatc 240

tctgaagatt acagcgtcgc cagcgcagct ctctctagcg acggccgcat cttcactggt 300

gtcaatgtat atcattttac tgggggacct tgtgcagaac tcgtggtgct gggcactgct 360

gctgctgcgg cagctggcaa cctgacttgt atcgtcgcga tcggaaatga gaacaggggc 420

atcttgagcc cctgcggacg gtgccgacag gtgcttctcg atctgcatcc tgggatcaaa 480

gccatagtga aggacagtga tggacagccg acggcagttg ggattcgtga attgctgccc 540

tctggttatg tgtgggaggg ctaatggatc cgctcagaca tgataagata cattgatgag 600

tttggacaaa ccacaactag aatgcagtga aaaaaatgct ttatttgtga aatttgtgat 660

gctattgctt tatttgtaac cattataagc tgcaataaac aagttaacaa caacaattgc 720

attcatttta tgtttcaggt tcaggggggag gtgtgggagg ttttttaaag caagtaaaac 780

ctctacaaat gtggtaggcg cgccgaagac aa 812

<210> 229
<211> 1533
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 229
tatagcaggt cactgacggg caccggagcc tcacgaagct tgaattgcgg cgacagatca 60

agtttccagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg tgtccccgga 120

agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca gcgtcttgtc 180

attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac ttcgcatatt 240

aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg aaaaagcctg 300

aactcaccgc gacgtctgtc gagaagtttc tgatcgaaaa gttcgacagc gtgtccgacc 360

tgatgcagct ctcggagggc gaagaatctc gtgctttcag cttcgatgta ggagggcgtg 420

gatatgtcct gcgggtaaat agctgcgccg atggtttcta caaagatcgt tatgtttatc 480

ggcactttgc atcggccgcg ctcccgattc cggaagtgct tgacattggg gaattcagcg 540

agagcctgac ctattgcatc tcccgccgtg cacagggtgt cacgttgcaa gatctgcctg 600

aaaccgaact gcccgctgtt ctgcagccgg tcgcggaggc catggatgcg atcgctgcgg 660

ccgatcttag ccagacgagc gggttcggcc cattcggacc gcaaggaatc ggtcaataca 720

ctacatggcg tgatttcata tgcgcgattg ctgatcccca tgtgtatcac tggcaaactg 780

tgatggacga caccgtcagt gcgtccgtcg cgcaggctct cgatgagctg atgctttggg 840

ccgaggactg ccccgaagtc cggcacctcg tgcacgcgga tttcggctcc aacaatgtcc 900

tgacggacaa tggccgcata acagcggtca ttgactggag cgaggcgatg ttcggggatt 960

cccaatacga ggtcgccaac atcttcttct ggaggccgtg gttggcttgt atggagcagc 1020

agacgcgcta cttcgagcgg aggcatccgg agcttgcagg atcgccgcgg ctccgggcgt 1080

atatgctccg cattggtctt gaccaactct atcagagctt ggttgacggc aatttcgatg 1140

atgcagcttg ggcgcagggt cgatgcgacg caatcgtccg atccggagcc gggactgtcg 1200

ggcgtacaca aatcgcccgc agaagcgcgg ccgtctggac cgatggctgt gtagaagtac 1260

tcgccgatag tggaaaccga cgccccagca ctcgtccgag ggcaaaggaa tagctcgctt 1320

tcttgctgtc caatttctat taaaggttcc tttgttccct aagtccaact actaaactgg 1380

gggatattat gaagggcctt gagcatctgg attctgccta ataaaaaaca tttattttca 1440

ttgcaatgat gtatttaaat tatttctgaa tattttacta aaaagggaat gtgggaggtc 1500

agtgcattta aaacataaag aaaacctgct tac 1533

<210> 230
<211> 1827
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 230
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag ctattccttt gccctcggac 240

gagtgctggg gcgtcggttt ccactatcgg cgagtacttc tacacagcca tcggtccaga 300

cggccgcgct tctgcgggcg atttgtgtac gcccgacagt cccggctccg gatcggacga 360

ttgcgtcgca tcgaccctgc gcccaagctg catcatcgaa attgccgtca accaagctct 420

gatagagttg gtcaagacca atgcggagca tatacgcccg gagccgcggc gatcctgcaa 480

gctccggatg cctccgctcg aagtagcgcg tctgctgctc catacaagcc aaccacggcc 540

tccagaagaa gatgttggcg acctcgtatt gggaatcccc gaacatcgcc tcgctccagt 600

caatgaccgc tgttatgcgg ccattgtccg tcaggacatt gttggagccg aaatccgcgt 660

gcacgaggtg ccggacttcg gggcagtcct cggcccaaag catcagctca tcgagagcct 720

gcgcgacgga cgcactgacg gtgtcgtcca tcacagtttg ccagtgatac acatggggat 780

cagcaatcgc gcatatgaaa tcacgccatg tagtgtattg accgattcct tgcggtccga 840

atgggccgaa cccgctcgtc tggctaagat cggccgcagc gatcgcatcc atggcctccg 900

cgaccggctg cagaacagcg ggcagttcgg tttcaggcag atcttgcaac gtgacaccct 960

gtgcacggcg ggagatgcaa taggtcaggc tctcgctgaa ttccccaatg tcaagcactt 1020

ccggaatcgg gagcgcggcc gatgcaaagt gccgataaac ataacgatct ttgtagaaac 1080

catcggcgca gctatttacc cgcaggacat atccacgccc tcctacatcg aagctgaaag 1140

cacgagattc ttcgccctcc gagagctgca tcaggtcgga cacgctgtcg aacttttcga 1200

tcagaaactt ctcgacagac gtcgcggtga gttcaggctt tttcatggtg gcggacgaaa 1260

ggcccggaga tgaggaagag gagaacagcg cggcagacgt gcgcttttga agcgtgcaga 1320

atgccgggcc tccggaggac cttcgggcgc ccgccccgcc cctgagcccg cccctgagcc 1380

cgcccccgga cccacccctt cccagcctct gagcccagaa agcgaaggag caaagctgct 1440

attggccgct gccccaaagg cctacccgct tccattgctc agcggtgctg tccatctgca 1500

cgagactagt gagtcgtgct acttccattt gtcacgtcct gcacgacgcg agctgcgggg 1560

cgggggggaa cttcctgact aggggaggag tagaaggtgg cgcgaagggg ccaccaaaga 1620

acggagccgg ttggcgccta ccggtggatg tggaatgtgt gcgaggccag aggccacttg 1680

tgtagcgcca agtgcccagc ggggctgcta aagcgcatgc tccagactgc cttgggaaaa 1740

gcgcctcccc tacccggtag agaaacttga tctgtcgccg caattcaagc ttcgtgaggc 1800

tccggtgccc gtcagtgacc tgctata 1827

<210> 231
<211> 1680
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 231
gagtcttcgg agacgcgaag aacaacgaga agatcctcaa cttctcctaa gccttttcac 60

taatagggag aagttcgatg gggcagcctt gggcagaccc acacttctgc tccatttccc 120

tggttcctgc agctctcaga ttctcccatt ttattcggga agcagctttc tggtttctgg 180

gtcctggatg tccttggtgc acactccaag gactcctcgt ccttaatcca tagtctgtat 240

tccctgagtc ctatcctggg aaccctcatc cggtcacttc ctcggcggga caatctcagc 300

tcccctcccc ctctcaggtc ggagcccaca cgcttggtgc gtgcacattt caaaaacgag 360

gcgggtccaa aaagagggag ggggggaatg agagaggccc agctactcgc ggctttacgg 420

gtgcacgtag ctcaggcctc tgcgcccttg agctgggact ggatgagccg agcgggaggc 480

ggggcgcgcg tcatcagctc cccccaccat ccagttccta taaatacgga ctgcagccct 540

ccctggtgct ctctgctcct ccctgttcta gagacagccg catcttcttg tgcagtgcca 600

ggctctctgc tcctcctgtt cgacagtcag ccgcatcttc ttttgcgtcg ccagatgatt 660

gaacaagatg gattgcacgc tggttctccg gccgcttggg tggagaggct attcggctat 720

gactgggcac aacagacaat cggctgctct gatgccgccg tgttccggct gtcagcgcag 780

gggcgcccgg ttctttttgt caagaccgac ctgtccggtg ccctgaatga actgcaggac 840

gaggcagcgc ggctatcgtg gctggccacg acgggcgttc cttgcgcagc tgtgctcgac 900

gttgtcactg aagcgggaag ggactggctg ctattgggcg aagtgccggg gcaggatctc 960

ctgtcatctc accttgctcc tgccgagaaa gtatccatca tggctgatgc aatgcggcgg 1020

ctgcatacgc ttgatccggc tacatgccca ttcgaccacc aagcgaaaca tcgcatcgag 1080

cgagcacgta ctcggatgga agccggtctt gtcgatcagg atgatctgga cgaggaacat 1140

caggggctcg cgccagccga actgttcgcc aggctcaagg cgcgcatgcc cgacggcgag 1200

gatctcgtcg tgacccatgg cgatgcctgc ttgccgaata tcatggtgga aaatggccgc 1260

ttttctggat tcatcgactg tggccggctg ggtgtggcgg accgctatca ggacatagcg 1320

ttggctaccc gtgatattgc tgaggaactt ggcggcgaat gggctgaccg cttcctcgtg 1380

ctttacggta tcgccgctcc cgattcgcag cgcatcgcct tctatcgcct tcttgacgag 1440

ttcttctgat gactcgcttt cttgctgtcc aatttctatt aaaggttcct ttgttcccta 1500

agtccaacta ctaaactggg ggatattatg aagggccttg agcatctgga ttctgcctaa 1560

taaaaaacat ttattttcat tgcaatgatg tatttaaatt atttctgaat attttactaa 1620

aaagggaatg tgggaggtca gtgcatttaa aacataaaga aaacctgctt acgaagactc 1680

<210> 232
<211> 1305
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 232
tatagcaggt cactgacggg caccggagcc tcacgaagtt tgaattgcgg cgacagatca 60

agtttccagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg tgtccccgga 120

agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca gcgtcttgtc 180

attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac ttcgcatatt 240

aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg attgaacaag 300

atggattgca cgctggttct ccggccgctt gggtggagag gctattcggc tatgactggg 360

cacaacagac aatcggctgc tctgatgccg ccgtgttccg gctgtcagcg caggggcgcc 420

cggttctttt tgtcaagacc gacctgtccg gtgccctgaa tgaactgcag gacgaggcag 480

cgcggctatc gtggctggcc acgacgggcg ttccttgcgc agctgtgctc gacgttgtca 540

ctgaagcggg aagggactgg ctgctattgg gcgaagtgcc ggggcaggat ctcctgtcat 600

ctcaccttgc tcctgccgag aaagtatcca tcatggctga tgcaatgcgg cggctgcata 660

cgcttgatcc ggctacatgc ccattcgacc accaagcgaa acatcgcatc gagcgagcac 720

gtactcggat ggaagccggt cttgtcgatc aggatgatct ggacgaggaa catcaggggc 780

tcgcgccagc cgaactgttc gccaggctca aggcgcgcat gcccgacggc gaggatctcg 840

tcgtgaccca tggcgatgcc tgcttgccga atatcatggt ggaaaatggc cgcttttctg 900

gattcatcga ctgtggccgg ctgggtgtgg cggaccgcta tcaggacata gcgttggcta 960

cccgtgatat tgctgaggaa cttggcggcg aatgggctga ccgcttcctc gtgctttacg 1020

gtatcgccgc tcccgattcg cagcgcatcg ccttctatcg ccttcttgac gagttcttct 1080

gatgactcgc tttcttgctg tccaatttct attaaaggtt cctttgttcc ctaagtccaa 1140

ctactaaact gggggatatt atgaagggcc ttgagcatct ggattctgcc taataaaaaa 1200

catttatttt cattgcaatg atgtatttaa attatttctg aatattttac taaaaaggga 1260

atgtgggagg tcagtgcatt taaaacataa agaaaacctg cttac 1305

<210> 233
<211> 1599

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 233
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcatcagaag aactcgtcaa 240

gaaggcgata gaaggcgatg cgctgcgaat cgggagcggc gataccgtaa agcacgagga 300

agcggtcagc ccattcgccg ccaagttcct cagcaatatc acgggtagcc aacgctatgt 360

cctgatagcg gtccgccaca cccagccggc cacagtcgat gaatccagaa aagcggccat 420

tttccaccat gatattcggc aagcaggcat cgccatgggt cacgacgaga tcctcgccgt 480

cgggcatgcg cgccttgagc ctggcgaaca gttcggctgg cgcgagcccc tgatgttcct 540

cgtccagatc atcctgatcg acaagaccgg cttccatccg agtacgtgct cgctcgatgc 600

gatgtttcgc ttggtggtcg aatgggcatg tagccggatc aagcgtatgc agccgccgca 660

ttgcatcagc catgatggat actttctcgg caggagcaag gtgagatgac aggagatcct 720

gccccggcac ttcgcccaat agcagccagt cccttcccgc ttcagtgaca acgtcgagca 780

cagctgcgca aggaacgccc gtcgtggcca gccacgatag ccgcgctgcc tcgtcctgca 840

gttcattcag ggcaccggac aggtcggtct tgacaaaaag aaccgggcgc ccctgcgctg 900

acagccggaa cacggcggca tcagagcagc cgattgtctg ttgtgcccag tcatagccga 960

atagcctctc cacccaagcg gccggagaac cagcgtgcaa tccatcttgt tcaatcatgg 1020

tggcggacga aaggcccgga gatgaggaag aggagaacag cgcggcagac gtgcgctttt 1080

gaagcgtgca gaatgccggg cctccggagg accttcgggc gcccgccccg cccctgagcc 1140

cgcccctgag cccgcccccg gacccacccc ttcccagcct ctgagcccag aaagcgaagg 1200

agcaaagctg ctattggccg ctgccccaaa ggcctacccg cttccattgc tcagcggtgc 1260

tgtccatctg cacgagacta gtgagtcgtg ctacttccat ttgtcacgtc ctgcacgacg 1320

cgagctgcgg ggcgggggggg aacttcctga ctaggggagg agtagaaggt ggcgcgaagg 1380

ggccaccaaa gaacggagcc ggttggcgcc taccggtgga tgtggaatgt gtgcgaggcc 1440

agaggccact tgtgtagcgc caagtgccca gcggggctgc taaagcgcat gctccagact 1500

gccttgggaa aagcgcctcc cctacccggt agagaaactt gatctgtcgc cgcaattcaa 1560

acttcgtgag gctccggtgc ccgtcagtga cctgctata 1599

<210> 234
<211> 1130
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 234
ttgtcttcgg cgcgcctccc gcccctaact ccgcccagtt ccgcccattc tccgccccat 60

ggctgactaa ttttttttat ttatgcagag gccgaggccg cctcggcctc tgagctattc 120

cagaagtagt gaggaggctt ttttggaggt ataggctttt gcaaaatgac cgagtacaag 180

cccacggtgc gcctcgccac ccgcgacgac gtccccaggg ccgtacgcac cctcgccgcc 240

gcgttcgccg actaccccgc cacgcgccac accgtcgatc cggaccgcca catcgagcgg 300

gtcaccgagc tgcaagaact cttcctcacg cgcgtcgggc tcgacatcgg caaggtgtgg 360

gtcgcggacg acggcgccgc ggtggcggtc tggaccacgc cggagagcgt cgaagcgggg 420

gcggtgttcg ccgagatcgg cccgcgcatg gccgagttga gcggttcccg gctggccgcg 480

cagcaacaga tggaaggcct cctggcgccg caccggccca aggagcccgc gtggttcctg 540

gccaccgtcg gcgtgtcgcc cgaccaccag ggcaagggtc tgggcagcgc cgtcgtgctc 600

cccggagtgg aggcggccga gcgcgccggg gtgcccgcct tcctggagac atccgcgccc 660

cgcaacctcc ccttctacga gcggctcggc ttcaccgtca ccgccgacgt cgaggtgccc 720

gaaggaccgc gcacctggtg catgacccgc aagcccggtg cctgatggat ccgctcagac 780

atgataagat acattgatga gtttggacaa accacaacta gaatgcagtg aaaaaaatgc 840

tttatttgtg aaatttgtga tgctattgct ttatttgtaa ccattataag ctgcaataaa 900

caagttaaca acaacaattg cattcatttt atgtttcagg ttcaggggga ggtgtgggag 960

gtttttaaa gcaagtaaaa cctctacaaa tgtggtaaaa tcgataatat atggtagggt 1020

tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg agtcgggcgc 1080

gcaaaaatga agtgaagttc ctatactttc tagattaatt aagaagactt 1130

<210> 235
<211> 1013
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 235
ttgtcttcgg cgcgcctacc acatttgtag aggttttact tgctttaaaa aacctcccac 60

acctcccccct gaacctgaaa cataaaatga atgcaattgt tgttgttaac ttgtttattg 120

cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 180

tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgag 240

cggatccatc aggcaccggg cttgcgggtc atgcaccagg tgcgcggtcc ttcgggcacc 300

tcgacgtcgg cggtgacggt gaagccgagc cgctcgtaga aggggaggtt gcggggcgcg 360

gatgtctcca ggaaggcggg caccccggcg cgctcggccg cctccactcc ggggagcacg 420

acggcgctgc ccagaccctt gccctggtgg tcgggcgaca cgccgacggt ggccaggaac 480

cacgcgggct ccttgggccg gtgcggcgcc aggaggcctt ccatctgttg ctgcgcggcc 540

agccgggaac cgctcaactc ggccatgcgc gggccgatct cggcgaacac cgcccccgct 600

tcgacgctct ccggcgtggt ccagaccgcc accgcggcgc cgtcgtccgc gacccacacc 660

ttgccgatgt cgagcccgac gcgcgtgagg aagagttctt gcagctcggt gacccgctcg 720

atgtggcggt ccggatcgac ggtgtggcgc gtggcggggt agtcggcgaa cgcggcggcg 780

agggtgcgta cggccctggg gacgtcgtcg cgggtggcga ggcgcaccgt gggcttgtac 840

tcggtcattt tgcaaaagcc tatacctcca aaaaagcctc ctcactactt ctggaatagc 900

tcagaggccg aggcggcctc ggcctctgca taaataaaaa aaattagtca gccatggggc 960

ggagaatggg cggaactggg cggagttagg ggcgggatta attaagaaga ctt 1013

<210> 236
<211> 1502
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 236
gagtcttcgg agacgcgaag aacaacgaga agatcctcaa cttctcctaa gccttttcac 60

taatagggag aagttcgatg gggcagcctt gggcagaccc acacttctgc tccatttccc 120

tggttcctgc agctctcaga ttctcccatt ttattcggga agcagctttc tggtttctgg 180

gtcctggatg tccttggtgc acactccaag gactcctcgt ccttaatcca tagtctgtat 240

tccctgagtc ctatcctggg aaccctcatc cggtcacttc ctcggcggga caatctcagc 300

tcccctcccc ctctcaggtc ggagcccaca cgcttggtgc gtgcacattt caaaaacgag 360

gcgggtccaa aaagagggag ggggggaatg agagaggccc agctactcgc ggctttacgg 420

gtgcacgtag ctcaggcctc tgcgcccttg agctgggact ggatgagccg agcgggaggc 480

ggggcgcgcg tcatcagctc cccccaccat ccagttccta taaatacgga ctgcagccct 540

ccctggtgct ctctgctcct ccctgttcta gagacagccg catcttcttg tgcagtgcca 600

ggctctctgc tcctcctgtt cgacagtcag ccgcatcttc ttttgcgtcg ccagatgacc 660

gagtacaagc ccacggtgcg cctcgccacc cgcgacgacg tccccagggc cgtacgcacc 720

ctcgccgccg cgttcgccga ctaccccgcc acgcgccaca ccgtcgatcc ggaccgccac 780

atcgagcggg tcaccgagct gcaagaactc ttcctcacgc gcgtcgggct cgacatcggc 840

aaggtgtggg tcgcggacga cggcgccgcg gtggcggtct ggaccacgcc ggagagcgtc 900

gaagcggggg cggtgttcgc cgagatcggc ccgcgcatgg ccgagttgag cggttcccgg 960

ctggccgcgc agcaacagat ggaaggcctc ctggcgccgc accggcccaa ggagcccgcg 1020

tggttcctgg ccaccgtcgg cgtgtcgccc gaccaccagg gcaagggtct gggcagcgcc 1080

gtcgtgctcc ccggagtgga ggcggccgag cgcgccgggg tgcccgcctt cctggagaca 1140

tccgcgcccc gcaacctccc cttctacgag cggctcggct tcaccgtcac cgccgacgtc 1200

gaggtgcccg aaggaccgcg cacctggtgc atgacccgca agcccggtgc ctgatggatc 1260

cgctcagaca tgataagata cattgatgag tttggacaaa ccacaactag aatgcagtga 1320

aaaaaatgct ttatttgtga aatttgtgat gctattgctt tatttgtaac cattataagc 1380

tgcaataaac aagttaacaa caacaattgc attcatttta tgtttcaggt tcaggggggag 1440

gtgtgggagg ttttttaaag caagtaaaac ctctacaaat gtggtaggcg cgccgaagac 1500

ac 1502

<210> 237
<211> 1256
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 237
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

tcaggcaccg ggcttgcggg tcatgcacca ggtgcgcggt ccttcgggca cctcgacgtc 300

ggcggtgacg gtgaagccga gccgctcgta gaaggggagg ttgcggggcg cggatgtctc 360

caggaaggcg ggcaccccgg cgcgctcggc cgcctccact ccggggagca cgacggcgct 420

gcccagaccc ttgccctggt ggtcgggcga cacgccgacg gtggccagga accacgcggg 480

ctccttgggc cggtgcggcg ccaggaggcc ttccatctgt tgctgcgcgg ccagccggga 540

accgctcaac tcggccatgc gcgggccgat ctcggcgaac accgcccccg cttcgacgct 600

ctccggcgtg gtccagaccg ccaccgcggc gccgtcgtcc gcgacccaca ccttgccgat 660

gtcgagcccg acgcgcgtga ggaagagttc ttgcagctcg gtgacccgct cgatgtggcg 720

gtccggatcg acggtgtggc gcgtggcggg gtagtcggcg aacgcggcgg cgagggtgcg 780

tacggccctg gggacgtcgt cgcgggtggc gaggcgcacc gtgggcttgt actcggtcat 840

gtgaagtgtc ccagcctgtt tatctacggc ttaaaaagtg ttcgagggga aaataggttg 900

cgcgagatta tagagatctg gcgcactaaa aaccagtatt tcacatgagt ccgcgtcttt 960

ttacgcactg cctctccctg acgcgggata aagtggtatt ctcaaacata tctcgcaagc 1020

ctgtcttgtg tccctgcaga gtcgctctgt gttcgaggcc acacgcgtca ccttaatatg 1080

cgaagtggac ctgggaccgc gccgccccga ctgcatctgc gtgttttcgc caatgacaag 1140

acgctgggcg gggtttgtgt catcatagaa ctaaagacat gcaaatatat ttcttccggg 1200

gacaccgcca gcaaacgcga gcaacgggcc acggggatga agcagctgga agacta 1256

<210> 238
<211> 1202
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 238
ttgtcttcgg cgcgcccagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgatgg 840

atccgctcag acatgataag atacattgat gagtttggac aaaccacaac tagaatgcag 900

tgaaaaaaat gctttatttg tgaaatttgt gatgctattg ctttatttgt aaccattata 960

agctgcaata aacaagttaa caacaacaat tgcattcatt ttatgtttca ggttcagggg 1020

gaggtgtggg aggtttttta aagcaagtaa aacctctaca aatgtggtaa aatcgataat 1080

atatggtagg gttcatagcc agagtaacct ttttttttaa ttttatttt attttatttt 1140

tgagtcgggc gcgcaaaaat gaagtgaagt tcctatactt tctagattaa ttaagaagac 1200

tt 1202

<210> 239
<211> 1085
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 239
ttgtcttcgg cgcgcctacc acatttgtag aggttttact tgctttaaaa aacctcccac 60

acctcccccc gaacctgaaa cataaaatga atgcaattgt tgttgttaac ttgtttattg 120

cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 180

tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgag 240

cggatccatc aggcaccggg cttgcgggtc atgcaccagg tgcgcggtcc ttcgggcacc 300

tcgacgtcgg cggtgacggt gaagccgagc cgctcgtaga aggggaggtt gcggggcgcg 360

gatgtctcca ggaaggcggg caccccggcg cgctcggccg cctccactcc ggggagcacg 420

acggcgctgc ccagaccctt gccctggtgg tcgggcgaca cgccgacggt ggccaggaac 480

cacgcgggct ccttgggccg gtgcggcgcc aggaggcctt ccatctgttg ctgcgcggcc 540

agccgggaac cgctcaactc ggccatgcgc gggccgatct cggcgaacac cgcccccgct 600

tcgacgctct ccggcgtggt ccagaccgcc accgcggcgc cgtcgtccgc gacccacacc 660

ttgccgatgt cgagcccgac gcgcgtgagg aagagttctt gcagctcggt gacccgctcg 720

atgtggcggt ccggatcgac ggtgtggcgc gtggcggggt agtcggcgaa cgcggcggcg 780

agggtgcgta cggccctggg gacgtcgtcg cgggtggcga ggcgcaccgt gggcttgtac 840

tcggtcatgc caccctgcag agtcgctctg tgttcgaggc cacacgcgtc accttaatat 900

gcgaagtgga cctgggaccg cgccgccccg actgcatctg cgtgttttcg ccaatgacaa 960

gacgctgggc ggggtttgtg tcatcataga actaaagaca tgcaaatata tttcttccgg 1020

ggacaccgcc agcaaacgcg agcaacgggc cacggggatg aagcagctgt taattaagaa 1080

gactt 1085

<210> 240
<211> 1743
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 240
ttgtcttcgg cgcgcctacc acatttgtag aggttttact tgctttaaaa aacctcccac 60

acctcccccc gaacctgaaa cataaaatga atgcaattgt tgttgttaac ttgtttattg 120

cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 180

tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgag 240

cggatccatc aggcaccggg cttgcgggtc atgcaccagg tgcgcggtcc ttcgggcacc 300

tcgacgtcgg cggtgacggt gaagccgagc cgctcgtaga aggggaggtt gcggggcgcg 360

gatgtctcca ggaaggcggg caccccggcg cgctcggccg cctccactcc ggggagcacg 420

acggcgctgc ccagaccctt gccctggtgg tcgggcgaca cgccgacggt ggccaggaac 480

cacgcgggct ccttgggccg gtgcggcgcc aggaggcctt ccatctgttg ctgcgcggcc 540

agccgggaac cgctcaactc ggccatgcgc gggccgatct cggcgaacac cgcccccgct 600

tcgacgctct ccggcgtggt ccagaccgcc accgcggcgc cgtcgtccgc gacccacacc 660

ttgccgatgt cgagcccgac gcgcgtgagg aagagttctt gcagctcggt gacccgctcg 720

atgtggcggt ccggatcgac ggtgtggcgc gtggcggggt agtcggcgaa cgcggcggcg 780

agggtgcgta cggccctggg gacgtcgtcg cgggtggcga ggcgcaccgt gggcttgtac 840

tcggtcatgc caccctgcag agtcgctctg tgttcgaggc cacacgcgtc accttaatat 900

gcgaagtgga cctgggaccg cgccgccccg actgcatctg cgtgttttcg ccaatgacaa 960

gacgctgggc ggggtttgtg tcatcataga actaaagaca tgcaaatata tttcttccgg 1020

ggacaccgcc agcaaacgcg agcaacgggc cacggggatg aagcagctgt agactctggg 1080

tagaatgttc tgtttcctgt aatataaaat cataaagtga tgatattatc aagtgaaaag 1140

gaaatgtggt accttaatct ttccacatca agccaatatc atgctgaagg ccagagaatc 1200

ttttttgcta aaaaacacaa tacagatata attaatagtt atcatttatg tttgatatta 1260

atcatatgaa tataattaat atgttttatt gtatcgatta ttgttgatat taatgtaatt 1320

actactaata cataacaaat ataactaatg gttatggctc agtaactaag gtaagatata 1380

agctacactg gtaaagaaag atcaatattg cttcagagta cactgaagta aatgaataac 1440

ttaaccggtc taggttgtca cttatattta tacgaaactt gatctgtcgc cgcaattcaa 1500

gcttcgtgag gctccggtgc ccgtcagtga cctgctatag aaacttgatc tgtcgccgca 1560

attcaagctt cgtgaggctc cggtgcccgt cagtgacctg ctatactctg aaatcgataa 1620

tatatggtag ggttcatagc cagagtaacc ttttttttta atttttattt tattttattt 1680

ttgagtcggg cgcgcaaaaa tgaagtgaag ttcctatact ttctagatta attaagaaga 1740

ctt 1743

<210> 241
<211> 1818
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 241
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagatgaccg agtacaagcc 240

cacggtgcgc ctcgccaccc gcgacgacgt ccccagggcc gtacgcaccc tcgccgccgc 300

gttcgccgac taccccgcca cgcgccacac cgtcgatccg gaccgccaca tcgagcgggt 360

caccgagctg caagaactct tcctcacgcg cgtcgggctc gatataggta aggtatgggt 420

ggcggacgac ggcgccgcgg tggcggtctg gaccacgccg gagagcgtcg aagcgggggc 480

ggtgttcgcc gagatcggcc cgcgcatggc cgagttgagc ggttcccggc tggccgcgca 540

gcaacagatg gaaggcctcc tggcgccgca ccggcccaag gagcccgcgt ggttcctggc 600

caccgtcggc gtgtcgcccg accaccaggg caagggtctg ggcagcgccg tcgtgctccc 660

cggagtggag gcggccgagc gcgccggggt gcccgccttc ctggagacat ccgcgccccg 720

caacctcccc ttctacgagc ggctcggctt caccgtcacc gccgacgtcg aggtgcccga 780

aggaccgcgc acctggtgca tgacccgcaa gcccggtgcc tgattagact ttgagtgatc 840

ttgagccttt cctagttcat cccaccccgc cccagagaga tctttgtgaa ggaaccttac 900

ttctgtggtg tgacataatt ggacaaacta cctacagaga tttaaagctc taaggtaaat 960

ataaaatttt taagtgtata atgtgttaaa ctactgattc taattgtttg tgtattttag 1020

attccaacct atggaactga tgaatgggag cagtggtgga atgcctttaa tgaggaaaac 1080

ctgttttgct cagaagaaat gccatctagt gatgatgagg ctactgctga ctctcaacat 1140

tctactcctc caaaaaagaa gagaaaggta gaagatccca aggactttcc ttcagaattg 1200

ctaagttttt tgagtcatgc tgtgtttagt aatagaactc ttgcttgctt tgctatttac 1260

accacaaagg aaaaagctgc actgctatac aagaaaatta tggaaaaata ttctgtaacc 1320

tttataagta ggcataacag ttataatcat aacatactgt tttttcttac tccacacagg 1380

catagagtgt ctgctattaa taactatgct caaaaattgt gtacctttag ctttttaatt 1440

tgtaaagggg ttaataagga atatttgatg tatagtgcct tgactagaga tcataatcag 1500

ccataccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc tccccctgaa 1560

cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag cttataatgg 1620

ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt cactgcattc 1680

tagttgtggt ttgtccaaac tcatcaatgt atcttatcat gtctggatct agcttcgtgt 1740

caaggacggt gactgcagtg aataataaaa tgtgtgtttg tccgaaatac gcgttttgag 1800

atttctcgag gaagacat 1818

<210> 242
<211> 1734
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 242
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagatgacgg agtacaagcc 240

cacggtaagg ctggcaactc gcgacgatgt gcctagggcg gtaaggaccc tggcggccgc 300

gttcgccgac tatccggcaa ctcgccacac ggtggatccg gaccggcaca tcgagcgggt 360

aactgagctg caagagctgt tcctgacgag agtaggtctg gacatcggta aggtatgggt 420

ggctgatgat ggtgcggcgg tggcggtatg gaccaccccg gagagcgtcg aagcgggggc 480

ggtgttcgcc gagatcggcc cgcgcatggc cgagttgagc ggttcccggc tggccgcgca 540

gcaacagatg gaaggcctcc tggcgccgca ccggcccaag gagcccgcgt ggttcctggc 600

caccgtcggc gtgtcgcccg accaccaggg caagggtctg ggcagcgccg tcgtgctccc 660

cggagtggag gcggccgagc gcgccggggt gcccgccttc ctggagacat ccgcgccccg 720

caacctcccc ttctacgagc ggctcggctt caccgtcacc gccgacgtcg aggtgcccga 780

aggaccgcgc acctggtgca tgacccgcaa gcccggtgcc tgattagact ttgagtgatc 840

ttgagccttt cctagttcat cccaccccgc cccagagaga tctttgtgaa ggaaccttac 900

ttctgtggtg tgacataatt ggacaaacta cctacagaga tttaaagctc taaggtaaat 960

ataaaatttt taagtgtata atgtgttaaa ctactgattc taattgtttg tgtattttag 1020

attccaacct atggaactga tgaatgggag cagtggtgga atgcctttaa tgaggaaaac 1080

ctgttttgct cagaagaaat gccatctagt gatgatgagg ctactgctga ctctcaacat 1140

tctactcctc caaaaaagaa gagaaaggta gaagatccca aggactttcc ttcagaattg 1200

ctaagttttt tgagtcatgc tgtgtttagt aatagaactc ttgcttgctt tgctatttac 1260

accacaaagg aaaaagctgc actgctatac aagaaaatta tggaaaaata ttctgtaacc 1320

tttataagta ggcataacag ttataatcat aacatactgt tttttcttac tccacacagg 1380

catagagtgt ctgctattaa taactatgct caaaaattgt gtacctttag ctttttaatt 1440

tgtaaagggg ttaataagga atatttgatg tatagtgcct tgactagaga tcataatcag 1500

ccataccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc tccccctgaa 1560

cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag cttataatgg 1620

ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt cactgcattc 1680

tagttgtggt ttgtccaaac tcatcaatgt atcttatcat gtctgggaag acat 1734

<210> 243
<211> 1818
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 243
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagatgacgg agtacaagcc 240

cacggtaagg ctggcaactc gcgacgatgt gcctagggcg gtaaggaccc tggcggccgc 300

gttcgccgac tatccggcaa ctcgccacac ggtggatccg gaccggcaca tcgagcgggt 360

aactgagctg caagagctgt tccttactcg ggtaggtctg gatataggta aggtatgggt 420

ggctgatgat ggtgcggcgg tggcggtatg gaccacccca gaaagtgtgg aggcgggtgc 480

ggtgttcgcg gagatcgggc cacgtatggc cgagctgtca ggttccaggt tagctgcaca 540

gcagcagatg gaaggtctgt tggccccgca ccggccgaag gagcccgcgt ggttcctggc 600

aacggtaggg gtaagtccag accaccaagg taagggtctg ggaagtgcgg tggtgttgcc 660

aggtgtggag gcggcagagc gggcgggtgt gcctgctttc ctcgagacta gcgccccgag 720

gaatctgcct ttctacgaaa gactcggttt cacggtaact gccgatgtgg aggtacctga 780

aggacctcgg acctggtgca tgacacgcaa gccaggtgcg tgattagact ttgagtgatc 840

ttgagccttt cctagttcat cccaccccgc cccagagaga tctttgtgaa ggaaccttac 900

ttctgtggtg tgacataatt ggacaaacta cctacagaga tttaaagctc taaggtaaat 960

ataaaatttt taagtgtata atgtgttaaa ctactgattc taattgtttg tgtattttag 1020

attccaacct atggaactga tgaatgggag cagtggtgga atgcctttaa tgaggaaaac 1080

ctgttttgct cagaagaaat gccatctagt gatgatgagg ctactgctga ctctcaacat 1140

tctactcctc caaaaaagaa gagaaaggta gaagatccca aggactttcc ttcagaattg 1200

ctaagttttt tgagtcatgc tgtgtttagt aatagaactc ttgcttgctt tgctatttac 1260

accacaaagg aaaaagctgc actgctatac aagaaaatta tggaaaaata ttctgtaacc 1320

tttataagta ggcataacag ttataatcat aacatactgt tttttcttac tccacacagg 1380

catagagtgt ctgctattaa taactatgct caaaaattgt gtacctttag ctttttaatt 1440

tgtaaagggg ttaataagga atatttgatg tatagtgcct tgactagaga tcataatcag 1500

ccataccaca tttgtagagg ttttacttgc tttaaaaaac ctcccacacc tccccctgaa 1560

cctgaaacat aaaatgaatg caattgttgt tgttaacttg tttattgcag cttataatgg 1620

ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt cactgcattc 1680

tagttgtggt ttgtccaaac tcatcaatgt atcttatcat gtctggatct agcttcgtgt 1740

caaggacggt gactgcagtg aataataaaa tgtgtgtttg tccgaaatac gcgttttgag 1800

atttctcgag gaagacat 1818

<210> 244
<211> 2011
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 244
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatga 420

ccgagtacaa gcccacggtg cgcctcgcca cccgcgacga cgtccccagg gccgtacgca 480

ccctcgccgc cgcgttcgcc gactaccccg ccacgcgcca caccgtcgat ccggaccgcc 540

acatcgagcg ggtcaccgag ctgcaagaac tcttcctcac gcgcgtcggg ctcgatatag 600

gtaaggtatg ggtggcggac gacggcgccg cggtggcggt ctggaccacg ccggagagcg 660

tcgaagcggg ggcggtgttc gccgagatcg gcccgcgcat ggccgagttg agcggttccc 720

ggctggccgc gcagcaacag atggaaggcc tcctggcgcc gcaccggccc aaggagcccg 780

cgtggttcct ggccaccgtc ggcgtgtcgc ccgaccacca gggcaagggt ctgggcagcg 840

ccgtcgtgct ccccggagtg gaggcggccg agcgcgccgg ggtgcccgcc ttcctggaga 900

catccgcgcc ccgcaacctc cccttctacg agcggctcgg cttcaccgtc accgccgacg 960

tcgaggtgcc cgaaggaccg cgcacctggt gcatgacccg caagcccggt gcctgattag 1020

actttgagtg atcttgagcc tttcctagtt catcccaccc cgccccagag agatctttgt 1080

gaaggaacct tacttctgtg gtgtgacata attggacaaa ctacctacag agatttaaag 1140

ctctaaggta aatataaaat ttttaagtgt ataatgtgtt aaactactga ttctaattgt 1200

ttgtgtattt tagattccaa cctatggaac tgatgaatgg gagcagtggt ggaatgcctt 1260

taatgaggaa aacctgtttt gctcagaaga aatgccatct agtgatgatg aggctactgc 1320

tgactctcaa cattctactc ctccaaaaaa gaagagaaag gtagaagatc ccaaggactt 1380

tccttcagaa ttgctaagtt ttttgagtca tgctgtgttt agtaatagaa ctcttgcttg 1440

ctttgctatt tacaccacaa aggaaaaagc tgcactgcta tacaagaaaa ttatggaaaa 1500

atattctgta acctttataa gtaggcataa cagttataat cataacatac tgtttttct 1560

tactccacac aggcatagag tgtctgctat taataactat gctcaaaaat tgtgtacctt 1620

tagctttta atttgtaaag gggttaataa ggaatatttg atgtatagtg ccttgactag 1680

agatcataat cagccatacc acatttgtag aggttttact tgctttaaaa aacctcccac 1740

acctcccct gaacctgaaa cataaaatga atgcaattgt tgttgttaac ttgtttattg 1800

cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 1860

tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgga 1920

tctagcttcg tgtcaaggac ggtgactgca gtgaataata aaatgtgtgt ttgtccgaaa 1980

tacgcgtttt gagatttctc gaggaagaca t 2011

<210> 245
<211> 2011
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 245
tagtcttcca gctgcttcat ccccgtggcc cgttgctcgc gtttgctggc ggtgtccccg 60

gaagaaatat atttgcatgt ctttagttct atgatgacac aaaccccgcc cagcgtcttg 120

tcattggcga aaacacgcag atgcagtcgg ggcggcgcgg tcccaggtcc acttcgcata 180

ttaaggtgac gcgtgtggcc tcgaacacag agcgactctg cagggacaca agacaggctt 240

gcgagatatg tttgagaata ccactttatc ccgcgtcagg gagaggcagt gcgtaaaaag 300

acgcggactc atgtgaaata ctggttttta gtgcgccaga tctctataat ctcgcgcaac 360

ctattttccc ctcgaacact ttttaagccg tagataaaca ggctgggaca cttcacatga 420

ccgagtacaa gcccacggtg cgcctcgcca cccgcgacga cgtccccagg gccgtacgca 480

ccctcgccgc cgcgttcgcc gactaccccg ccacgcgcca caccgtcgat ccggaccgcc 540

acatcgagcg ggtcaccgag ctgcaagaac tcttcctcac gcgcgtcggg ctcgatatag 600

gtaaggtatg ggtggcggac gacggcgccg cggtggcggt ctggaccacg ccggagagcg 660

tcgaagcggg ggcggtgttc gccgagatcg gcccgcgcat ggccgagttg agcggttccc 720

ggctggccgc gcagcaacag atggaaggcc tcctggcgcc gcaccggccc aaggagcccg 780

cgtggttcct ggccaccgtc ggcgtgtcgc ccgaccacca gggcaagggt ctgggcagcg 840

ccgtcgtgct ccccggagtg gaggcggccg agcgcgccgg ggtgcccgcc ttcctggaga 900

catccgcgcc ccgcaacctc cccttctacg agcggctcgg cttcaccgtc accgccgacg 960

tcgaggtgcc cgaaggaccg cgcacctggt gcatgacccg caagcccggt gcctgattag 1020

actttgagtg atcttgagcc tttcctagtt catcccaccc cgccccagag agatctttgt 1080

gaaggaacct tacttctgtg gtgtgacata attggacaaa ctacctacag agatttaaag 1140

ctctaaggta aatataaaat ttttaagtgt ataatgtgtt aaactactga ttctaattgt 1200

ttgtgtattt tagattccaa cctatggaac tgatgaatgg gagcagtggt ggaatgcctt 1260

taatgaggaa aacctgtttt gctcagaaga aatgccatct agtgatgatg aggctactgc 1320

tgactctcaa cattctactc ctccaaaaaa gaagagaaag gtagaagatc ccaaggactt 1380

tccttcagaa ttgctaagtt ttttgagtca tgctgtgttt agtaatagaa ctcttgcttg 1440

ctttgctatt tacaccacaa aggaaaaagc tgcactgcta tacaagaaaa ttatggaaaa 1500

atattctgta acctttataa gtaggcataa cagttataat cataacatac tgtttttttct 1560

tactccacac aggcatagag tgtctgctat taataactat gctcaaaaat tgtgtacctt 1620

tagcttttta atttgtaaag gggttaataa ggaatatttg atgtatagtg ccttgactag 1680

agatcataat cagccatacc acatttgtag aggttttact tgctttaaaa aacctcccac 1740

acctcccccct gaacctgaaa cataaaatga atgcaattgt tgttgttaac ttgtttattg 1800

cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 1860

tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgga 1920

tctagcttcg tgtcaaggac ggtgactgca gtgaataata aaatgtgtgt ttgtccgaaa 1980

tacgcgtttt gagatttctc gaggaagaca t 2011

<210> 246
<211> 1344
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 246
tagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

gaggctggga aggggtgggt ccgggggcgg gctcaggggc gggctcaggg gcggggcggg 420

cgcccgaagg tcctccggag gcccggcatt ctgcacgctt caaaagcgca cgtctgccgc 480

gctgttctcc tcttcctcat ctccgggcct ttcgtccgcc accatgaccg agtacaagcc 540

cacggtgcgc ctcgccaccc gcgacgacgt ccccagggcc gtacgcaccc tcgccgccgc 600

gttcgccgac taccccgcca cgcgccacac cgtcgatccg gaccgccaca tcgagcgggt 660

caccgagctg caagaactct tcctcacgcg cgtcgggctc gacatcggca aggtgtgggt 720

cgcggacgac ggcgccgcgg tggcggtctg gaccacgccg gagagcgtcg aagcgggggc 780

ggtgttcgcc gagatcggcc cgcgcatggc cgagttgagc ggttcccggc tggccgcgca 840

gcaacagatg gaaggcctcc tggcgccgca ccggcccaag gagcccgcgt ggttcctggc 900

caccgtcggc gtgtcgcccg accaccaggg caagggtctg ggcagcgccg tcgtgctccc 960

cggagtggag gcggccgagc gcgccggggt gcccgccttc ctggagacat ccgcgccccg 1020

caacctcccc ttctacgagc ggctcggctt caccgtcacc gccgacgtcg aggtgcccga 1080

aggaccgcgc acctggtgca tgacccgcaa gcccggtgcc tgatgactcg ctttcttgct 1140

gtccaatttc tattaaaggt tcctttgttc cctaagtcca actactaaac tgggggatat 1200

tatgaagggc cttgagcatc tggattctgc ctaataaaaa acatttattt tcattgcaat 1260

gatgtattta aattatttct gaatatttta ctaaaaaggg aatgtgggag gtcagtgcat 1320

ttaaaacata aagaaagaag acac 1344

<210> 247
<211> 1469
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 247
ttgtcttcgg cgcgcctcta ccgggtaggg gaggcgcttt tcccaaggca gtctggagca 60

tgcgctttag cagccccgct gggcacttgg cgctacacaa gtggcctctg gcctcgcaca 120

cattccacat ccaccggtag gcgccaaccg gctccgttct ttggtggccc cttcgcgcca 180

ccttctactc ctcccctagt caggaagttc ccccccgccc cgcagctcgc gtcgtgcagg 240

acgtgacaaa tggaagtagc acgactcact agtctcgtgc agatggacag caccgctgag 300

caatggaagc gggtaggcct ttggggcagc ggccaatagc agctttgctc cttcgctttc 360

tgggctcagg ggcggggcgg gcgcccgaag gtcctccgga ggcccggcat tctgcacgct 420

tcaaaagcgc acgtctgccg cgctgttctc ctcttcctca tctccgggcc tttcgtcaca 480

cccaagctgt ctagagccgc caccatgacc gagtacaagc ccacggtgcg cctcgccacc 540

cgcgacgacg tccccagggc cgtacgcacc ctcgccgccg cgttcgccga ctaccccgcc 600

acgcgccaca ccgtcgatcc ggaccgccac atcgagcggg tcaccgagct gcaagaactc 660

ttcctcacgc gcgtcgggct cgacatcggc aaggtgtggg tcgcggacga cggcgccgcg 720

gtggcggtct ggaccacgcc ggagagcgtc gaagcggggg cggtgttcgc cgagatcggc 780

ccgcgcatgg ccgagttgag cggttcccgg ctggccgcgc agcaacagat ggaaggcctc 840

ctggcgccgc accggcccaa ggagcccgcg tggttcctgg ccaccgtcgg cgtgtcgccc 900

gaccaccagg gcaagggtct gggcagcgcc gtcgtgctcc ccggagtgga ggcggccgag 960

cgcgccgggg tgcccgcctt cctggagaca tccgcgcccc gcaacctccc cttctacgag 1020

cggctcggct tcaccgtcac cgccgacgtc gaggtgcccg aaggaccgcg cacctggtgc 1080

atgacccgca agcccggtgc ctgatggatc cgctcagaca tgataagata cattgatgag 1140

tttggacaaa ccacaactag aatgcagtga aaaaaatgct ttatttgtga aatttgtgat 1200

gctattgctt tatttgtaac cattataagc tgcaataaac aagttaacaa caacaattgc 1260

attcatttta tgtttcaggt tcaggggggag gtgtgggagg ttttttaaag caagtaaaac 1320

ctctacaaat gtggtaaaat cgataatata tggtagggtt catagccaga gtaacctttt 1380

tttttaattt ttatttttatt ttatttttga gtcgggcgcg caaaaatgaa gtgaagttcc 1440

tatactttct agattaatta agaagactt 1469

<210> 248
<211> 2029
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 248
ttgtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat gaccgagtac aagcccacgg tgcgcctcgc cacccgcgac gacgtcccca 720

gggccgtacg caccctcgcc gccgcgttcg ccgactaccc cgccacgcgc cacaccgtcg 780

atccggaccg ccacatcgag cgggtcaccg agctgcaaga actcttcctc acgcgcgtcg 840

ggctcgacat cggcaaggtg tgggtcgcgg acgacggcgc cgcggtggcg gtctggacca 900

cgccggagag cgtcgaagcg ggggcggtgt tcgccgagat cggcccgcgc atggccgagt 960

tgagcggttc ccggctggcc gcgcagcaac agatggaagg cctcctggcg ccgcaccggc 1020

ccaaggagcc cgcgtggttc ctggccaccg tcggcgtgtc gcccgaccac cagggcaagg 1080

gtctgggcag cgccgtcgtg ctccccggag tggaggcggc cgagcgcgcc ggggtgcccg 1140

ccttcctgga gacatccgcg ccccgcaacc tccccttcta cgagcggctc ggcttcaccg 1200

tcaccgccga cgtcgaggtg cccgaaggac cgcgcacctg gtgcatgacc cgcaagcccg 1260

gtgcctgatg gatccgctca gacatgataa gatacattga tgagtttgga caaaccacaa 1320

ctagaatgca gtgaaaaaaa tgctttattt gtgaaatttg tgatgctatt gctttatttg 1380

taaccattat aagctgcaat aaacaagtta acaacaacaa ttgcattcat tttatgtttc 1440

aggttcaggg ggaggtgtgg gaggtttttt aaagcaagta aaacctctac aaatgtggta 1500

aaatcgataa tatatggtag ggttcatagc cagagtaacc ttttttttta atttttattt 1560

tattttattt ttgagtcggg cgcgccaaaa tgaagtgaag ttcctatact ttctagatag 1620

actctgggta gaatgttctg tttcctgtaa tataaaatca taaagtgatg atattatcaa 1680

gtgaaaagga aatgtggtac cttaatcttt ccacatcaag ccaatatcat gctgaaggcc 1740

agagaatctt ttttgctaaa aaacacaata cagatataat taatagttat catttatgtt 1800

tgatattaat catatgaata taattaatat gttttattgt atcgattatt gttgatatta 1860

atgtaattac tactaataca taacaaatat aactaatggt tatggctcag taactaaggt 1920

aagatataag ctacactggt aaagaaagat caatattgct tcagagtaca ctgaagtaaa 1980

tgaataactt aaccggtcta ggttgtcact tatatttata cgaagactt 2029

<210> 249
<211> 1508
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 249
ttgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca ataaaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

tcaggcaccg ggcttgcggg tcatgcacca ggtgcgcggt ccttcgggca cctcgacgtc 300

ggcggtgacg gtgaagccga gccgctcgta gaaggggagg ttgcggggcg cggatgtctc 360

caggaaggcg ggcaccccgg cgcgctcggc cgcctccact ccggggagca cgacggcgct 420

gcccagaccc ttgccctggt ggtcgggcga cacgccgacg gtggccagga accacgcggg 480

ctccttgggc cggtgcggcg ccaggaggcc ttccatctgt tgctgcgcgg ccagccggga 540

accgctcaac tcggccatgc gcgggccgat ctcggcgaac accgcccccg cttcgacgct 600

ctccggcgtg gtccagaccg ccaccgcggc gccgtcgtcc gcgacccaca ccttgccgat 660

gtcgagcccg acgcgcgtga ggaagagttc ttgcagctcg gtgacccgct cgatgtggcg 720

gtccggatcg acggtgtggc gcgtggcggg gtagtcggcg aacgcggcgg cgagggtgcg 780

tacggccctg gggacgtcgt cgcgggtggc gaggcgcacc gtgggcttgt actcggtcat 840

gtgaagtgtc ccagcctgtt tatctacggc ttaaaaagtg ttcgaggggа aaataggttg 900

cgcgagatta tagagatctg gcgcactaaa aaccagtatt tcacatgagt ccgcgtcttt 960

ttacgcactg cctctccctg acgcgggata aagtggtatt ctcaaacata tctcgcaagc 1020

ctgtcttgtg tccaagcttg acgaaaggcc cggagatgag gaagaggaga acagcgcggc 1080

agacgtgcgc ttttgaagcg tgcagaatgc cgggcctccg gaggaccttc gggcgcccgc 1140

cccgcccctg agcccagaaa gcgaaggagc aaagctgcta ttggccgctg ccccaaaggc 1200

ctacccgctt ccattgctca gcggtgctgt ccatctgcac gagactagtg agtcgtgcta 1260

cttccatttg tcacgtcctg cacgacgcga gctgcggggc gggggggaac ttcctgacta 1320

ggggaggagt agaaggtggc gcgaaggggc caccaaagaa cggagccggt tggcgcctac 1380

cggtggatgt ggaatgtgtg cgaggccaga ggccacttgt gtagcgccaa gtgcccagcg 1440

gggctgctaa agcgcatgct ccagactgcc ttgggaaaag cgcctcccct acccggtaga 1500

gaagactt 1508

<210> 250
<211> 1337
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 250
gttttcttta tgttttaaat gcactgacct cccacattcc ctttttagta aaatattcag 60

aaataattta aatacatcat tgcaatgaaa ataaatgttt tttattaggc agaatccaga 120

tgctcaaggc ccttcataat atcccccagt ttagtagttg gacttaggga acaaaggaac 180

ctttaataga aattggacag caagaaagcg agttatcagg caccgggctt gcgggtcatg 240

caccaggtgc gcggtccttc gggcacctcg acgtcggcgg tgacggtgaa gccgagccgc 300

tcgtagaagg ggaggttgcg gggcgcggat gtctccagga aggcgggcac cccggcgcgc 360

tcggccgcct ccactccggg gagcacgacg gcgctgccca gacccttgcc ctggtggtcg 420

ggcgacacgc cgacggtggc caggaaccac gcgggctcct tgggccggtg cggcgccagg 480

aggccttcca tctgttgctg cgcggccagc cgggaaccgc tcaactcggc catgcgcggg 540

ccgatctcgg cgaacaccgc ccccgcttcg acgctctccg gcgtggtcca gaccgccacc 600

gcggcgccgt cgtccgcgac ccacaccttg ccgatgtcga gcccgacgcg cgtgaggaag 660

agttcttgca gctcggtgac ccgctcgatg tggcggtccg gatcgacggt gtggcgcgtg 720

gcggggtagt cggcgaacgc ggcggcgagg gtgcgtacgg ccctggggac gtcgtcgcgg 780

gtggcgaggc gcaccgtggg cttgtactcg gtcatggtgg cgacgtgcgc tccggaggct 840

tgcagaatgc ggaacaccgc gcgggcagga acagggccca cactaccgcc ccacaccccg 900

cctcccgcac cgccccttcc cggccgctgc tctcagaaag cgaaggagca aagctgctat 960

tggccgctgc cccaaaggcc tacccgcttc cattgctcag cggtgctgtc catctgcacg 1020

agactagtga gtcgtgctac ttccatttgt cacgtcctgc acgacgcgag ctgcggggcg 1080

gggggaact tcctgactag gggaggagta gaaggtggcg cgaaggggcc accaaagaac 1140

ggagccggtt ggcgcctacc ggtggatgtg gaatgtgtgc gaggccagag gccacttgtg 1200

tagcgccaag tgcccagcgg ggctgctaaa gcgcatgctc cagactgcct tgggaaaagc 1260

gcctccccta cccggtagag aaacttgatc tgtcgccgca attcaaactt cgtgaggctc 1320

cggtgcccgt cagtgta 1337

<210> 251
<211> 1349
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 251
gtgtcttctt tctttatgtt ttaaatgcac tgacctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtt atcaggcacc gggcttgcgg 240

gtcatgcacc aggtgcgcgg tccttcgggc acctcgacgt cggcggtgac ggtgaagccg 300

agccgctcgt agaaggggag gttgcggggc gcggatgtct ccaggaaggc gggcaccccg 360

gcgcgctcgg ccgcctccac tccggggagc acgacggcgc tgcccagacc cttgccctgg 420

tggtcgggcg acacgccgac ggtggccagg aaccacgcgg gctccttggg ccggtgcggc 480

gccaggaggc cttccatctg ttgctgcgcg gccagccggg aaccgctcaa ctcggccatg 540

cgcgggccga tctcggcgaa caccgccccc gcttcgacgc tctccggcgt ggtccagacc 600

gccaccgcgg cgccgtcgtc cgcgacccac accttgccga tgtcgagccc gacgcgcgtg 660

aggaagagtt cttgcagctc ggtgacccgc tcgatgtggc ggtccggatc gacggtgtgg 720

cgcgtggcgg ggtagtcggc gaacgcggcg gcgagggtgc gtacggccct ggggacgtcg 780

tcgcgggtgg cgaggcgcac cgtgggcttg tactcggtca tggtggcgac gtgcgctccg 840

gaggcttgca gaatgcggaa caccgcgcgg gcaggaacag ggcccacact accgccccac 900

accccgcctc ccgcaccgcc ccttcccggc cgctgctctc agaaagcgaa ggagcaaagc 960

tgctattggc cgctgcccca aaggcctacc cgcttccatt gctcagcggt gctgtccatc 1020

tgcacgagac tagtgagtcg tgctacttcc atttgtcacg tcctgcacga cgcgagctgc 1080

ggggcggggg ggaacttcct gactagggga ggagtagaag gtggcgcgaa ggggccacca 1140

aagaacggag ccggttggcg cctaccggtg gatgtggaat gtgtgcgagg ccagaggcca 1200

cttgtgtagc gccaagtgcc cagcggggct gctaaagcgc atgctccaga ctgccttggg 1260

aaaagcgcct cccctacccg gtagagaaac ttgatctgtc gccgcaattc aaacttcgtg 1320

aggctccggt gcccgtcagt ggaagacta 1349

<210> 252
<211> 1349
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 252
gtgtcttctt tctttatgtt ttaaatgcac tgatctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtt atcaggcacc gggcttgcgg 240

gtcatgcacc aggtgcgcgg tccttcgggc acctcgacgt cggcggtgac ggtgaagccg 300

agccgctcgt agaaggggag gttgcggggc gcggatgtct ccaggaaggc gggcaccccg 360

gcgcgctcgg ccgcctccac tccggggagc acgacggcgc tgcccagacc cttgccctgg 420

tggtcgggcg acacgccgac ggtggccagg aaccacgcgg gctccttggg ccggtgcggc 480

gccaggaggc cttccatctg ttgctgcgcg gccagccggg aaccgctcaa ctcggccatg 540

cgcgggccga tctcggcgaa caccgccccc gcttcgacgc tctccggcgt ggtccagacc 600

gccaccgcgg cgccgtcgtc cgcgacccac accttgccga tgtcgagccc gacgcgcgtg 660

aggaagagtt cttgcagctc ggtgacccgc tcgatgtggc ggtccggatc gacggtgtgg 720

cgcgtggcgg ggtagtcggc gaacgcggcg gcgagggtgc gtacggccct ggggacgtcg 780

tcgcgggtgg cgaggcgcac cgtgggcttg tactcggtca tggtggcgac gtgcgctccg 840

gaggcttgca gaatgcggaa caccgcgcgg gcaggaacag ggcccacact accgccccac 900

accccgcctc ccgcaccgcc ccttcccggc cgctgctctc agaaagcgaa ggagcaaagc 960

tgctattggc cgctgcccca aaggcctacc cgcttccatt gctcagcggt gctgtccatc 1020

tgcacgagac tagtgagtcg tgctacttcc atttgtcacg tcctgcacga cgcgagctgc 1080

ggggcggggg ggaacttcct gactagggga ggagtagaag gtggcgcgaa ggggccacca 1140

aagaacggag ccggttggcg cctaccggtg gatgtggaat gtgtgcgagg ccagaggcca 1200

cttgtgtagc gccaagtgcc cagcggggct gctaaagcgc atgctccaga ctgccttggg 1260

aaaagcgcct cccctacccg gtagagaaac ttgatctgtc gccgcaattc aaacttcgtg 1320

aggctccggt gcccgtcagt ggaagacta 1349

<210> 253
<211> 2075
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 253
ttgtcttcgg cgcgccaagt ttccagagct ttcgaggaag gtttcttcaa ctcaaattca 60

tccgcctgat aattttctta tattttccta aagaaggaag agaagcgcat agaggagaag 120

ggaaataatt ttttaggagc ctttcttacg gctatgagga atttggggct cagttgaaaa 180

gcctaaactg cctctcggga ggttgggcgc ggcgaactac tttcagcggc gcacgcagac 240

ggcgtctacg tgaggggtga taagtgacgc aacactcgtt gcataaattt gcgctccgcc 300

agcccggagc atttaggggc ggttggcttt gttgggtgag cttgtttgtg tccctgtggg 360

tggacgtggt tggtgattgg caggatcctg gtatccgcta caggtactgg cccacagccg 420

taaagagctg cgggggcgtg agaggggga atgggtgagg tcaagctgga ggcttcttgg 480

ggttgggtgg gccgctgagg ggaggggagg gcgaggtgac gcgacacccg gcctttctgg 540

gagagtgggc cttgttgacc taaggggggc gagggcagtt ggcacgcgca cgcgccgaca 600

gaaactaaca gacattaacc aacagcgatt ccgtcgcgtt tacttgggag gaaggcggaa 660

aagaggtagt ttgtgtggct tctggaaacc ctaaatttgg aatcccagta tgagaatggt 720

gtcccttctt gtgtttcaat gggattttta cttcgcgagt cttgtgggtt tggttttgtt 780

ttcagtttgc ctaacaccgt gcttaggttt gaggcagatt ggagttcggt cgggggagtt 840

tgaatatccg gaacagttag tggggaaagc tgtggacgct tggtaagaga gcgctctgga 900

ttttccgctg ttgacgttga aaccttgaat gacgaatttc gtattaagtg acttagcctt 960

gtaaaattga ggggaggctt gcggaatatt aacgtattta aggcattttg aaggaatagt 1020

tgctaatttt gaagaatatt aggtgtaaaa gcaagaaata caatgatcct gaggtgacac 1080

gcttatgttt tacttttaaa ctaggtcaaa atgaccgagt acaagcccac ggtgcgcctc 1140

gccacccgcg acgacgtccc cagggccgta cgcaccctcg ccgccgcgtt cgccgactac 1200

cccgccacgc gccacaccgt cgatccggac cgccacatcg agcgggtcac cgagctgcaa 1260

gaactcttcc tcacgcgcgt cgggctcgac atcggcaagg tgtgggtcgc ggacgacggc 1320

gccgcggtgg cggtctggac cacgccggag agcgtcgaag cgggggcggt gttcgccgag 1380

atcggcccgc gcatggccga gttgagcggt tcccggctgg ccgcgcagca acagatggaa 1440

ggcctcctgg cgccgcaccg gcccaaggag cccgcgtggt tcctggccac cgtcggcgtg 1500

tcgcccgacc accagggcaa gggtctgggc agcgccgtcg tgctccccgg agtggaggcg 1560

gccgagcgcg ccggggtgcc cgccttcctg gagacatccg cgccccgcaa cctccccttc 1620

tacgagcggc tcggcttcac cgtcaccgcc gacgtcgagg tgcccgaagg accgcgcacc 1680

tggtgcatga cccgcaagcc cggtgcctga tggatccgct cagacatgat aagatacatt 1740

gatgagtttg gacaaaccac aactagaatg cagtgaaaaa aatgctttat ttgtgaaatt 1800

tgtgatgcta ttgctttatt tgtaaccatt ataagctgca ataaacaagt taacaacaac 1860

aattgcattc attttatgtt tcaggttcag ggggaggtgt gggaggtttt ttaaagcaag 1920

taaaacctct acaaatgtgg taaaatcgat aatatatggt agggttcata gccagagtaa 1980

ccttttttt taatttttat tttattttat ttttgagtcg ggcgcgcaaa aatgaagtga 2040

agttcctata ctttctagat taattaagaa gactt 2075

<210> 254
<211> 1031
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 254
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

tcagtcctgc tcctcggcca cgaagtgcac gcagttgccg gccgggtcgc gcagggcgaa 300

ctcccgcccc cacggctgct cgccgatctc ggtcatggcc ggcccggagg cgtcccggaa 360

gttcgtggac acgacctccg accactcggc gtacagctcg tccaggccgc gcacccacac 420

ccaggccagg gtgttgtccg gcaccacctg gtcctggacc gcgctgatga acagggtcac 480

gtcgtcccgg accacaccgg cgaagtcgtc ctccacgaag tcccgggaga acccgagccg 540

gtcggtccag aactcgaccg ctccggcgac gtcgcgcgcg gtgagcaccg gaacggcact 600

ggtcaacttg gccatgtgaa gtgtcccagc ctgtttatct acggcttaaa aagtgttcga 660

ggggaaaata ggttgcgcga gattatagag atctggcgca ctaaaaacca gtatttcaca 720

tgagtccgcg tctttttacg cactgcctct ccctgacgcg ggataaagtg gtattctcaa 780

acatatctcg caagcctgtc ttgtgtccct gcagagtcgc tctgtgttcg aggccacacg 840

cgtcacctta atatgcgaag tggacctggg accgcgccgc cccgactgca tctgcgtgtt 900

ttcgccaatg acaagacgct gggcggggtt tgtgtcatca tagaactaaa gacatgcaaa 960

tatatttctt ccggggacac cgccagcaaa cgcgagcaac gggccacggg gatgaagcag 1020

ctggaagact a 1031

<210> 255
<211> 844
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 255
gtgtcttcta ccacatttgt agaggtttta cttgctttaa aaaacctccc acacctcccc 60

ctgaacctga aacataaaat gaatgcaatt gttgttgtta acttgtttat tgcagcttat 120

aatggttaca ataaaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 180

cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg agcggatcca 240

tcagtcctgc tcctcggcca cgaagtgcac gcagttgccg gccgggtcgc gcagggcgaa 300

ctcccgcccc cacggctgct cgccgatctc ggtcatggcc ggcccggagg cgtcccggaa 360

gttcgtggac acgacctccg accactcggc gtacagctcg tccaggccgc gcacccacac 420

ccaggccagg gtgttgtccg gcaccacctg gtcctggacc gcgctgatga acagggtcac 480

gtcgtcccgg accacaccgg cgaagtcgtc ctccacgaag tcccgggaga acccgagccg 540

gtcggtccag aactcgaccg ctccggcgac gtcgcgcgcg gtgagcaccg gaacggcact 600

ggtcaacttg gccatgccac cctgcagagt cgctctgtgt tcgaggccac acgcgtcacc 660

ttaatatgcg aagtggacct gggaccgcgc cgccccgact gcatctgcgt gttttcgcca 720

atgacaagac gctgggcggg gtttgtgtca tcatagaact aaagacatgc aaatatattt 780

cttccgggga caccgccagc aaacgcgagc aacgggccac ggggatgaag cagctggaag 840

acta 844

<210> 256
<211> 1283
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 256
aagtcttctc taccgggtag gggaggcgct tttcccaagg cagtctggag catgcgcttt 60

agcagccccg ctgggcactt ggcgctacac aagtggcctc tggcctcgca cacattccac 120

atccaccggt aggcgccaac cggctccgtt ctttggtggc cccttcgcgc caccttctac 180

tcctccccta gtcaggaagt tccccccccgc cccgcagctc gcgtcgtgca ggacgtgaca 240

aatggaagta gcacgactca ctagtctcgt gcagatggac agcaccgctg agcaatggaa 300

gcgggtaggc ctttggggca gcggccaata gcagctttgc tccttcgctt tctgggctca 360

ggggcggggc gggcgcccga aggtcctccg gaggcccggc attctgcacg cttcaaaagc 420

gcacgtctgc cgcgctgttc tcctcttcct catctccggg cctttcgtca agcttggaca 480

caagacaggc ttgcgagata tgtttgagaa taccacttta tcccgcgtca gggagaggca 540

gtgcgtaaaa agacgcggac tcatgtgaaa tactggtttt tagtgcgcca gatctctata 600

atctcgcgca acctattttc ccctcgaaca ctttttaagc cgtagataaa caggctggga 660

cacttcacat ggccaagttg accagtgccg ttccggtgct caccgcgcgc gacgtcgccg 720

gagcggtcga gttctggacc gaccggctcg ggttctcccg ggacttcgtg gaggacgact 780

tcgccggtgt ggtccgggac gacgtgaccc tgttcatcag cgcggtccag gaccaggtgg 840

tgccggacaa caccctggcc tgggtgtggg tgcgcggcct ggacgagctg tacgccgagt 900

ggtcggaggt cgtgtccacg aacttccggg acgcctccgg gccggccatg accgagatcg 960

gcgagcagcc gtgggggcgg gagttcgccc tgcgcgaccc ggccggcaac tgcgtgcact 1020

tcgtggccga ggagcaggac tgatggatcc gctcagacat gataagatac attgatgagt 1080

ttggacaaac cacaactaga atgcagtgaa aaaaatgctt tatttgtgaa atttgtgatg 1140

ctattgcttt atttgtaacc attataagct gcaataaaca agttaacaac aacaattgca 1200

ttcattttat gtttcaggtt cagggggagg tgtgggaggt tttttaaagc aagtaaaacc 1260

tctacaaatg tggtagaaga caa 1283

<210> 257
<211> 1121
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 257
gtgtcttctt tctttatgtt ttaaatgcac tgatctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtc agtcctgctc ctcggccacg 240

aagtgcacgc agttgccggc cgggtcgcgc agggcgaact cccgccccca cggctgctcg 300

ccgatctcgg tcatggccgg cccggaggcg tcccggaagt tcgtggacac gacctccgac 360

cactcggcgt acagctcgtc caggccgcgc acccacaccc aggccagggt gttgtccggc 420

accacctggt cctggaccgc gctgatgaac agggtcacgt cgtcccggac cacaccggcg 480

aagtcgtcct ccacgaagtc ccgggagaac ccgagccggt cggtccagaa ctcgaccgct 540

ccggcgacgt cgcgcgcggt gagcaccgga acggcactgg tcaacttggc catggtggcg 600

acgtgcgctc cggaggcttg cagaatgcgg aacaccgcgc gggcaggaac agggcccaca 660

ctaccgcccc acaccccgcc tcccgcaccg ccccttcccg gccgctgctc tcagaaagcg 720

aaggagcaaa gctgctattg gccgctgccc caaaggccta cccgcttcca ttgctcagcg 780

gtgctgtcca tctgcacgag actagtgagt cgtgctactt ccatttgtca cgtcctgcac 840

gacgcgagct gcggggcggg ggggaacttc ctgactaggg gaggagtaga aggtggcgcg 900

aaggggccac caaagaacgg agccggttgg cgcctaccgg tggatgtgga atgtgtgcga 960

ggccagaggc cacttgtgta gcgccaagtg cccagcgggg ctgctaaagc gcatgctcca 1020

gactgccttg ggaaaagcgc ctcccctacc cggtagagaa acttgatctg tcgccgcaat 1080

tcaaacttcg tgaggctccg gtgcccgtca gtggaagact a 1121

<210> 258
<211> 788

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 258
aagtcttctt aattaatccc gcccctaact ccgcccagtt ccgcccattc tccgccccat 60

ggctgactaa ttttttttat ttatgcagag gccgaggccg cctcggcctc tgagctattc 120

cagaagtagt gaggaggctt ttttggaggt ataggctttt gcaaaatggc caagttgacc 180

agtgccgttc cggtgctcac cgcgcgcgac gtcgccggag cggtcgagtt ctggaccgac 240

cggctcgggt tctcccggga cttcgtggag gacgacttcg ccggtgtggt ccgggacgac 300

gtgaccctgt tcatcagcgc ggtccaggac caggtggtgc cggacaacac cctggcctgg 360

gtgtgggtgc gcggcctgga cgagctgtac gccgagtggt cggaggtcgt gtccacgaac 420

ttccgggacg cctccgggcc ggccatgacc gagatcggcg agcagccgtg ggggcgggag 480

ttcgccctgc gcgacccggc cggcaactgc gtgcacttcg tggccgagga gcaggactga 540

tggatccgct cagacatgat aagatacatt gatgagtttg gacaaaccac aactagaatg 600

cagtgaaaaa aatgctttat ttgtgaaatt tgtgatgcta ttgctttatt tgtaaccatt 660

ataagctgca ataaacaagt taacaacaac aattgcattc attttatgtt tcaggttcag 720

ggggaggtgt gggaggtttt ttaaagcaag taaaacctct acaaatgtgg taggcgcgcc 780

gaagacaa 788

<210> 259
<211> 2852
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 259
gtgtcttctt tctttatgtt ttaaatgcac tgacctccca cattcccttt ttagtaaaat 60

attcagaaat aatttaaata catcattgca atgaaaataa atgtttttta ttaggcagaa 120

tccagatgct caaggccctt cataatatcc cccagtttag tagttggact tagggaacaa 180

aggaaccttt aatagaaatt ggacagcaag aaagcgagtc actattagtc tttcttctcg 240

tagacttcaa acttatactt gatgcctttt tcctcctgga cctcagagag gacgcctggg 300

tattctggga gaagtttata tttccccaaa tcaatttctg ggaaaaacgt gtcactttca 360

aattcctgca tgatccttgt cacaaagagt ctgaggtggc ctggttgatt catggcttcc 420

tggtaaacag aactgcctcc gactatccaa accatgtcta ctttacttgc caattccggt 480

tgttcaataa gtcttaaggc atcatccaaa cttttggcaa gaaaatgagc tcctcgtggt 540

ggttctttga gttctctact gagaactata ttaattctgt cctttaaagg tcgattcttc 600

tcaggaatgg agaaccaggt tttcctaccc ataatcacca gattctgttt accttccact 660

gaagaggttg tggtcattct ttggaagtac ttgaactcgt tcctgagcgg aggccagggc 720

aagtctccgt tcttgccaat ccccatattt tgggacacgg cgacgatgca gttcaatggt 780

cgaaccattt tgctgtattt aatagtaaaa tatactttag tgtgatgatt gtggtgtgat 840

ccaatggcac aaatccaaca aaagagtaaa taatcgctct attgctcacc ggatggccaa 900

tccaatagct atatggcaac aatctctcaa ttgtcaccat aagcagccag atttggaata 960

aaaggaaaca cggacaccca aagtagtcgg ttccgctgcg gagttgcccg ttacgacaga 1020

ctgcccactg gttcgtgggt atctgctcca cagttaggat tatccgcatt caggggccgg 1080

aggactacta actagctcaa tagactcttc gcaccatgtc tgtattagag cgtcctatgg 1140

gtcaccccat aggcaggccg ccagcgcagc caccgccacg gtcgcccgtg aggaatgcgg 1200

tgactcatcg acctgatcta cactggggaa gtgctgagtg aaacactccg caactttcat 1260

ggtgttacta ggtttttcga agtagttagc cggataacga acgttttctc cttcaaccgc 1320

gtgagcagtc tattgatact cggtccgggg aaacaggagt gcttgatcta gacacggctg 1380

gtgtgccacg cccactattg atcggtatga attgcttcta agtttcagta gggggagggg 1440

tataaaacag gcacacaaag gtaccgtagt accagagtgc tagcgcccag tgggccctgt 1500

gggtgggtac aacccacagg ctgttttaat cagaagaact cgtcaagaag gcgatagaag 1560

gcgatgcgct gcgaatcggg agcggcgata ccgtaaagca cgaggaagcg gtcagcccat 1620

tcgccgccaa gttcctcagc aatatcacgg gtagccaacg ctatgtcctg atagcggtcc 1680

gccacaccca gccggccaca gtcgatgaat ccagaaaagc ggccattttc caccatgata 1740

ttcggcaagc aggcatcgcc atgggtcacg acgagatcct cgccgtcggg catgcgcgcc 1800

ttgagcctgg cgaacagttc ggctggcgcg agcccctgat gttcctcgtc cagatcatcc 1860

tgatcgacaa gaccggcttc catccgagta cgtgctcgct cgatgcgatg tttcgcttgg 1920

tggtcgaatg ggcatgtagc cggatcaagc gtatgcagcc gccgcattgc atcagccatg 1980

atggatactt tctcggcagg agcaaggtga gatgacagga gatcctgccc cggcacttcg 2040

cccaatagca gccagtccct tcccgcttca gtgacaacgt cgagcacagc tgcgcaagga 2100

acgcccgtcg tggccagcca cgatagccgc gctgcctcgt cctgcagttc attcagggca 2160

ccggacaggt cggtcttgac aaaaagaacc gggcgcccct gcgctgacag ccggaacacg 2220

gcggcatcag agcagccgat tgtctgttgt gcccagtcat agccgaatag cctctccacc 2280

caagcggccg gagaaccagc gtgcaatcca tcttgttcaa tcatggtggc gacgtgcgct 2340

ccggaggctt gcagaatgcg gaacaccgcg cgggcaggaa cagggcccac actaccgccc 2400

cacaccccgc ctcccgcacc gccccttccc ggccgctgct ctcagaaagc gaaggagcaa 2460

agctgctatt ggccgctgcc ccaaaggcct acccgcttcc attgctcagc ggtgctgtcc 2520

atctgcacga gactagtgag tcgtgctact tccatttgtc acgtcctgca cgacgcgagc 2580

tgcggggcgg gggggaactt cctgactagg ggaggagtag aaggtggcgc gaaggggcca 2640

ccaaagaacg gagccggttg gcgcctaccg gtggatgtgg aatgtgtgcg aggccagagg 2700

ccacttgtgt agcgccaagt gcccagcggg gctgctaaag cgcatgctcc agactgcctt 2760

gggaaaagcg cctcccctac ccggtagaga aacttgatct gtcgccgcaa ttcaaacttc 2820

gtgaggctcc ggtgcccgtc agtggaagac ta 2852

<210> 260
<211> 2121
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 260
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcactatcag cccttctgcc 240

aaatctggta gctatagttg atgttcgagg cgaagtcttg ggtgaacacc ggcctaaagt 300

tgctcgggat ctcagggaag tacacatctc cttcgggttc gatgtcgatg gtggagatgt 360

gcagagtgtc cacttggtcg atcagtgact tgtagatttc gccccctccg gacacaatga 420

catggtcggt gatcttcttg aggttcgtga gagcgtcctt gatcgaaggg aagatcagca 480

catcctcatt gtcggaagtg aagctggatc tggtcacgac ggcgtatttc cggttcggca 540

gggcacccat ggattcgaaa gtcttgcgac cgacaagcaa ccactggttg taggtgatgg 600

ccttgaacag cagctgctct ccctttgcgg accagggaat atctgggccg ttcccaatca 660

ctccgttctt tgaaatcgcc accatggggc cgggattttc ctccacgtcc ccgcatgtta 720

gcagacttcc cctgccctca gatgtaccga agaactcgtc aagaaggcga tagaaggcga 780

tgcgctgcga atcgggagcg gcgataccgt aaagcacgag gaagcggtca gcccattcgc 840

cgccaagttc ctcagcaata tcacgggtag ccaacgctat gtcctgatag cggtccgcca 900

cacccagccg gccacagtcg atgaatccag aaaagcggcc attttccacc atgatattcg 960

gcaagcaggc atcgccatgg gtcacgacga gatcctcgcc gtcgggcatg cgcgccttga 1020

gcctggcgaa cagttcggct ggcgcgagcc cctgatgttc ctcgtccaga tcatcctgat 1080

cgacaagacc ggcttccatc cgagtacgtg ctcgctcgat gcgatgtttc gcttggtggt 1140

cgaatgggca tgtagccgga tcaagcgtat gcagccgccg cattgcatca gccatgatgg 1200

atactttctc ggcaggagca aggtgagatg acaggagatc ctgccccggc acttcgccca 1260

atagcagcca gtcccttccc gcttcagtga caacgtcgag cacagctgcg caaggaacgc 1320

ccgtcgtggc cagccacgat agccgcgctg cctcgtcctg cagttcattc agggcaccgg 1380

acaggtcggt cttgacaaaa agaaccgggc gcccctgcgc tgacagccgg aacacggcgg 1440

catcagagca gccgattgtc tgttgtgccc agtcatagcc gaatagcctc tccacccaag 1500

cggccggaga accagcgtgc aatccatctt gttcaatcat ggtggcggac gaaaggcccg 1560

gagatgagga agaggagaac agcgcggcag acgtgcgctt ttgaagcgtg cagaatgccg 1620

ggcctccgga ggaccttcgg gcgcccgccc cgcccctgag cccgcccctg agcccgcccc 1680

cggacccacc ccttcccagc ctctgagccc agaaagcgaa ggagcaaagc tgctattggc 1740

cgctgcccca aaggcctacc cgcttccatt gctcagcggt gctgtccatc tgcacgagac 1800

tagtgagtcg tgctacttcc atttgtcacg tcctgcacga cgcgagctgc ggggcggggg 1860

ggaacttcct gactagggga ggagtagaag gtggcgcgaa ggggccacca aagaacggag 1920

ccggttggcg cctaccggtg gatgtggaat gtgtgcgagg ccagaggcca cttgtgtagc 1980

gccaagtgcc cagcggggct gctaaagcgc atgctccaga ctgccttggg aaaagcgcct 2040

cccctacccg gtagagaaac ttgatctgtc gccgcaattc aaacttcgtg aggctccggt 2100

gcccgtcagt gacctgctat a 2121

<210> 261
<211> 2366
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 261
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgatta 840

aaacagcctg tgggttgtac ccacccacag ggcccactgg gcgctagcac tctggtacta 900

cggtaccttt gtgtgcctgt tttatacccc tccccctact gaaacttaga agcaattcat 960

accgatcaat agtgggcgtg gcacaccagc cgtgtctaga tcaagcactc ctgtttcccc 1020

ggaccgagta tcaatagact gctcacgcgg ttgaaggaga aaacgttcgt tatccggcta 1080

actacttcga aaaacctagt aacaccatga aagttgcgga gtgtttcact cagcacttcc 1140

ccagtgtaga tcaggtcgat gagtcaccgc attcctcacg ggcgaccgtg gcggtggctg 1200

cgctggcggc ctgcctatgg ggtgacccat aggacgctct aatacagaca tggtgcgaag 1260

agtctattga gctagttagt agtcctccgg cccctgaatg cggataatcc taactgtgga 1320

gcagataccc acgaaccagt gggcagtctg tcgtaacggg caactccgca gcggaaccga 1380

ctactttggg tgtccgtgtt tccttttatt ccaaatctgg ctgcttatgg tgacaattga 1440

gagattgttg ccatatagct attggattgg ccatccggtg agcaatagag cgattattta 1500

ctcttttgtt ggatttgtgc cattggatca caccacaatc atcacactaa agtatatttt 1560

actattaaat acagcaaaat ggttcgacca ttgaactgca tcgtcgccgt gtcccaaaat 1620

atggggattg gcaagaacgg agacttgccc tggcctccgc tcaggaacga gttcaagtac 1680

ttccaaagaa tgaccacaac ctcttcagtg gaaggtaaac agaatctggt gattatgggt 1740

aggaaaacct ggttctccat tcctgagaag aatcgacctt taaaggacag aattaatata 1800

gttctcagta gagaactcaa agaaccacca cgaggagctc attttcttgc caaaagtttg 1860

gatgatgcct taagacttat tgaacaaccg gaattggcaa gtaaagtaga catggtttgg 1920

atagtcggag gcagttctgt ttaccaggaa gccatgaatc aaccaggcca cctcagactc 1980

tttgtgacaa ggatcatgca ggaatttgaa agtgacacgt ttttcccaga aattgatttg 2040

gggaaatata aacttctccc agaataccca ggcgtcctct ctgaggtcca ggaggaaaaa 2100

ggcatcaagt ataagtttga agtctacgag aagaaagact aatagtgact cgctttcttg 2160

ctgtccaatt tctattaaag gttcctttgt tccctaagtc caactactaa actgggggat 2220

attatgaagg gccttgagca tctggattct gcctaataaa aaacatttat tttcattgca 2280

atgatgtatt taaattattt ctgaatattt tactaaaaag ggaatgtggg aggtcagtgc 2340

atttaaaaca taaagaaaga agacac 2366

<210> 262
<211> 2785
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 262
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gatgaccgag 240

tacaagccca cggtgcgcct cgccacccgc gacgacgtcc ccagggccgt acgcaccctc 300

gccgccgcgt tcgccgacta ccccgccacg cgccacaccg tcgatccgga ccgccacatc 360

gagcgggtca ccgagctgca agaactcttc ctcacgcgcg tcgggctcga catcggcaag 420

gtgtgggtcg cggacgacgg cgccgcggtg gcggtctgga ccacgccgga gagcgtcgaa 480

gcgggggcgg tgttcgccga gatcggcccg cgcatggccg agttgagcgg ttcccggctg 540

gccgcgcagc aacagatgga aggcctcctg gcgccgcacc ggcccaagga gcccgcgtgg 600

ttcctggcca ccgtcggcgt gtcgcccgac caccagggca agggtctggg cagcgccgtc 660

gtgctccccg gagtggaggc ggccgagcgc gccggggtgc ccgccttcct ggagacatcc 720

gcgccccgca acctcccctt ctacgagcgg ctcggcttca ccgtcaccgc cgacgtcgag 780

gtgcccgaag gaccgcgcac ctggtgcatg acccgcaagc ccggtgcctg agaaacccgt 840

atacaccgga ccttttctcc cctccctctc cacttacctt tttcccctct tcggcatgaa 900

acaaggatta ttcaagtgga aacgcgattt aatatgcggc tggccaccgc ggaataacgg 960

caattgtgta tctgctggaa gccaagcctg cctagccgat agcccttgac cgggtgtgta 1020

ggatagccca ggaaccagca atacgcgaca ggttatggta gagtagatac ctagccaggg 1080

gcaatgggac tgcattgcat atccctaatg aaccattgag atttctctgg tcattacccg 1140

gtgatggtta ctagaggggg gcctctagta ctagatctat actgcctgat agggtcgcgg 1200

ctggccgacc atgacctgta tagtcagttg atttgagcaa tatggttcga ccattgaact 1260

gcatcgtcgc cgtgtcccaa aatatgggga ttggcaagaa cggagacttg ccctggcctc 1320

cgctcaggaa cgagttcaag tacttccaaa gaatgaccac aacctcttca gtggaaggta 1380

aacagaatct ggtgattatg ggtaggaaaa cctggttctc cattcctgag aagaatcgac 1440

ctttaaagga cagaattaat atagttctca gtagagaact caaagaacca ccacgaggag 1500

ctcattttct tgccaaaagt ttggatgatg ccttaagact tattgaacaa ccggaattgg 1560

caagtaaagt agacatggtt tggatagtcg gaggcagttc tgtttaccag gaagccatga 1620

atcaaccagg ccacctcaga ctctttgtga caaggatcat gcaggaattt gaaagtgaca 1680

cgtttttccc agaaattgat ttggggaaat ataaacttct cccagagtac ccaggtgtgt 1740

taagtgaggt gcaagaggaa aaaggtatca agtacaagtt cgaggtatat gaaaagaagg 1800

attaatggat ccgctcagac atgataagat acattgatga gtttggacaa accacaacta 1860

gaatgcagtg ataattagac tttgagtgat cttgagcctt tcctagttca tcccaccccg 1920

ccccagagag atctttgtga aggaacctta cttctgtggt gtgacataat tggacaaact 1980

acctacagag atttaaagct ctaaggtaaa tataaaattt ttaagtgtat aatgtgttaa 2040

actactgatt ctaattgttt gtgtatttta gattccaacc tatggaactg atgaatggga 2100

gcagtggtgg aatgccttta atgaggaaaa cctgttttgc tcagaagaaa tgccatctag 2160

tgatgatgag gctactgctg actctcaaca ttctactcct ccaaaaaaga agagaaaggt 2220

agaagatccc aaggactttc cttcagaatt gctaagtttt ttgagtcatg ctgtgtttag 2280

taatagaact cttgcttgct ttgctattta caccacaaag gaaaaagctg cactgctata 2340

caagaaaatt atggaaaaat attctgtaac ctttataagt aggcataaca gttataatca 2400

taacatactg ttttttctta ctccacacag gcatagagtg tctgctatta ataactatgc 2460

tcaaaaattg tgtaccttta gctttttaat ttgtaaaggg gttaataagg aatatttgat 2520

gtatagtgcc ttgactagag atcataatca gccataccac atttgtagag gttttacttg 2580

ctttaaaaaa cctcccacac ctccccctga acctgaaaca taaaatgaat gcaattgttg 2640

ttgttaactt gtttattgca gcttataatg gttacaaata aagcaatagc atcacaaatt 2700

tcacaaataa agcatttttt tcactgcatt ctagttgtgg tttgtccaaa ctcatcaatg 2760

tatcttatca tgtctgggaa gacac 2785

<210> 263
<211> 2222
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 263
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gagatatgtt tgagaatacc actttatccc gcgtcaggga gaggcagtgc 300

gtaaaaagac gcggactcat gtgaaatact ggtttttagt gcgccagatc tctataatct 360

cgcgcaacct attttcccct cgaacacttt ttaagccgta gataaacagg ctgggacact 420

tcacatgacc gagtacaagc ccacggtgcg cctcgccacc cgcgacgacg tccccagggc 480

cgtacgcacc ctcgccgccg cgttcgccga ctaccccgcc acgcgccaca ccgtcgatcc 540

ggaccgccac atcgagcggg tcaccgagct gcaagaactc ttcctcacgc gcgtcgggct 600

cgacatcggc aaggtgtggg tcgcggacga cggcgccgcg gtggcggtct ggaccacgcc 660

ggagagcgtc gaagcggggg cggtgttcgc cgagatcggc ccgcgcatgg ccgagttgag 720

cggttcccgg ctggccgcgc agcaacagat ggaaggcctc ctggcgccgc accggcccaa 780

ggagcccgcg tggttcctgg ccaccgtcgg cgtgtcgccc gaccaccagg gcaagggtct 840

gggcagcgcc gtcgtgctcc ccggagtgga ggcggccgag cgcgccgggg tgcccgcctt 900

cctggagaca tccgcgcccc gcaacctccc cttctacgag cggctcggct tcaccgtcac 960

cgccgacgtc gaggtgcccg aaggaccgcg cacctggtgc atgacccgca agcccggtgc 1020

ctgagaaacc cgtatacacc ggacctttc tcccctccct ctccacttac ctttttcccc 1080

tcttcggcat gaaacaagga ttattcaagt ggaaacgcga tttaatatgc ggctggccac 1140

cgcggaataa cggcaattgt gtatctgctg gaagccaagc ctgcctagcc gatagccctt 1200

gaccgggtgt gtaggatagc ccaggaacca gcaatacgcg acaggttatg gtagagtaga 1260

tacctagcca ggggcaatgg gactgcattg catatcccta atgaaccatt gagatttctc 1320

tggtcattac ccggtgatgg ttactagagg ggggcctcta gtactagatc tatactgcct 1380

gatagggtcg cggctggccg accatgacct gtatagtcag ttgatttgag caatatggtt 1440

cgaccattga actgcatcgt cgccgtgtcc caaaatatgg ggattggcaa gaacggagac 1500

ttgccctggc ctccgctcag gaacgagttc aagtacttcc aaagaatgac cacaacctct 1560

tcagtggaag gtaaacagaa tctggtgatt atgggtagga aaacctggtt ctccattcct 1620

gagaagaatc gacctttaaa ggacagaatt aatatagttc tcagtagaga actcaaagaa 1680

ccaccacgag gagctcattt tcttgccaaa agtttggatg atgccttaag acttattgaa 1740

caaccggaat tggcaagtaa agtagacatg gtttggatag tcggaggcag ttctgtttac 1800

caggaagcca tgaatcaacc aggccacctc agactctttg tgacaaggat catgcaggaa 1860

tttgaaagtg acacgttttt cccagaaatt gatttgggga aatataaact tctcccagaa 1920

tacccaggcg tcctctctga ggtccaggag gaaaaaggca tcaagtataa gtttgaagtc 1980

tacgagaaga aagactaata gtgactcgct ttcttgctgt ccaatttcta ttaaaggttc 2040

ctttgttccc taagtccaac tactaaactg ggggatatta tgaagggcct tgagcatctg 2100

gattctgcct aataaaaaac atttattttc attgcaatga tgtatttaaa ttatttctga 2160

atattttact aaaaagggaa tgtgggaggt cagtgcattt aaaacataaa gaaagaagac 2220

ac 2222

<210> 264
<211> 2717
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 264
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gagatatgtt tgagaatacc actttatccc gcgtcaggga gaggcagtgc 300

gtaaaaagac gcggactcat gtgaaatact ggtttttagt gcgccagatc tctataatct 360

cgcgcaacct attttcccct cgaacacttt ttaagccgta gataaacagg ctgggacact 420

tcacatgacc gagtacaagc ccacggtgcg cctcgccacc cgcgacgacg tccccagggc 480

cgtacgcacc ctcgccgccg cgttcgccga ctaccccgcc acgcgccaca ccgtcgatcc 540

ggaccgccac atcgagcggg tcaccgagct gcaagaactc ttcctcacgc gcgtcgggct 600

cgacatcggc aaggtgtggg tcgcggacga cggcgccgcg gtggcggtct ggaccacgcc 660

ggagagcgtc gaagcggggg cggtgttcgc cgagatcggc ccgcgcatgg ccgagttgag 720

cggttcccgg ctggccgcgc agcaacagat ggaaggcctc ctggcgccgc accggcccaa 780

ggagcccgcg tggttcctgg ccaccgtcgg cgtgtcgccc gaccaccagg gcaagggtct 840

gggcagcgcc gtcgtgctcc ccggagtgga ggcggccgag cgcgccgggg tgcccgcctt 900

cctggagaca tccgcgcccc gcaacctccc cttctacgag cggctcggct tcaccgtcac 960

cgccgacgtc gaggtgcccg aaggaccgcg cacctggtgc atgacccgca agcccggtgc 1020

ctgagaaacc cgtatacacc ggacctttc tcccctccct ctccacttac ctttttcccc 1080

tcttcggcat gaaacaagga ttattcaagt ggaaacgcga tttaatatgc ggctggccac 1140

cgcggaataa cggcaattgt gtatctgctg gaagccaagc ctgcctagcc gatagccctt 1200

gaccgggtgt gtaggatagc ccaggaacca gcaatacgcg acaggttatg gtagagtaga 1260

tacctagcca ggggcaatgg gactgcattg catatcccta atgaaccatt gagatttctc 1320

tggtcattac ccggtgatgg ttactagagg ggggcctcta gtactagatc tatactgcct 1380

gatagggtcg cggctggccg accatgacct gtatagtcag ttgatttgag caatatggtt 1440

cgaccattga actgcatcgt cgccgtgtcc caaaatatgg ggattggcaa gaacggagac 1500

ttgccctggc ctccgctcag gaacgagttc aagtacttcc aaagaatgac cacaacctct 1560

tcagtggaag gtaaacagaa tctggtgatt atgggtagga aaacctggtt ctccattcct 1620

gagaagaatc gacctttaaa ggacagaatt aatatagttc tcagtagaga actcaaagaa 1680

ccaccacgag gagctcattt tcttgccaaa agtttggatg atgccttaag acttattgaa 1740

caaccggaat tggcaagtaa agtagacatg gtttggatag tcggaggcag ttctgtttac 1800

caggaagcca tgaatcaacc aggccacctc agactctttg tgacaaggat catgcaggaa 1860

tttgaaagtg acacgttttt cccagaaatt gatttgggga aatataaact tctcccagag 1920

tacccaggtg tgttaagtga ggtgcaagag gaaaaaggta tcaagtacaa gttcgaggta 1980

tatgaaaaga aggattaatg gatccgctca gacatgataa gatacattga tgagtttgga 2040

caaaccacaa ctagaatgca gtgataatta gactttgagt gatcttgagc ctttcctagt 2100

tcatcccacc ccgccccaga gagatctttg tgaaggaacc ttacttctgt ggtgtgacat 2160

aattggacaa actacctaca gagatttaaa gctctaaggt aaatataaaa tttttaagtg 2220

tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca acctatggaa 2280

ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt tgctcagaag 2340

aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact cctccacaga 2400

cctggtgacc gtcaggaaga agattcagtg agaggacacg aggtatgtca tggtttttaa 2460

tcaataaata aagaggtttt attcatcgga cagtcgttgt agcctgtaaa agactcgccc 2520

cggaggggggt tcccccgatg tgaggggcat gcagtagtat ggtgtcctga gtgtctcgga 2580

tgcgtccttg aactcgcact ctaccgccgt gggggttaat aaagttttgc tgcgccggta 2640

ggggggggagg ccgaggataa taaagttgct acgtactggt tgaagtctaa caatctctcg 2700

gggggatccg aagacac 2717

<210> 265
<211> 2553
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 265
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gagatatgtt tgagaatacc actttatccc gcgtcaggga gaggcagtgc 300

gtaaaaagac gcggactcat gtgaaatact ggtttttagt gcgccagatc tctataatct 360

cgcgcaacct attttcccct cgaacacttt ttaagccgta gataaacagg ctgggacact 420

tcacatgacc gagtacaagc ccacggtgcg cctcgccacc cgcgacgacg tccccagggc 480

cgtacgcacc ctcgccgccg cgttcgccga ctaccccgcc acgcgccaca ccgtcgatcc 540

ggaccgccac atcgagcggg tcaccgagct gcaagaactc ttcctcacgc gcgtcgggct 600

cgacatcggc aaggtgtggg tcgcggacga cggcgccgcg gtggcggtct ggaccacgcc 660

ggagagcgtc gaagcggggg cggtgttcgc cgagatcggc ccgcgcatgg ccgagttgag 720

cggttcccgg ctggccgcgc agcaacagat ggaaggcctc ctggcgccgc accggcccaa 780

ggagcccgcg tggttcctgg ccaccgtcgg cgtgtcgccc gaccaccagg gcaagggtct 840

gggcagcgcc gtcgtgctcc ccggagtgga ggcggccgag cgcgccgggg tgcccgcctt 900

cctggagaca tccgcgcccc gcaacctccc cttctacgag cggctcggct tcaccgtcac 960

cgccgacgtc gaggtgcccg aaggaccgcg cacctggtgc atgacccgca agcccggtgc 1020

ctgattaaaa cagcctgtgg gttgtaccca cccacagggc ccactgggcg ctagcactct 1080

ggtactacgg tacctttgtg tgcctgtttt ataccctcc ccctactgaa acttagaagc 1140

aattcatacc gatcaatagt gggcgtggca caccagccgt gtctagatca agcactcctg 1200

tttccccgga ccgagtatca atagactgct cacgcggttg aaggagaaaa cgttcgttat 1260

ccggctaact acttcgaaaa acctagtaac accatgaaag ttgcggagtg tttcactcag 1320

cacttcccca gtgtagatca ggtcgatgag tcaccgcatt cctcacgggc gaccgtggcg 1380

gtggctgcgc tggcggcctg cctatggggt gacccatagg acgctctaat acagacatgg 1440

tgcgaagagt ctattgagct agttagtagt cctccggccc ctgaatgcgg ataatcctaa 1500

ctgtggagca gatacccacg aaccagtggg cagtctgtcg taacgggcaa ctccgcagcg 1560

gaaccgacta ctttgggtgt ccgtgtttcc ttttattcca aatctggctg cttatggtga 1620

caattgagag attgttgcca tatagctatt ggattggcca tccggtgagc aatagagcga 1680

ttatttactc ttttgttgga tttgtgccat tggatcacac cacaatcatc acactaaagt 1740

atattttact attaaataca gcaaaatggt tcgaccattg aactgcatcg tcgccgtgtc 1800

ccaaaatatg gggattggca agaacggaga cttgccctgg cctccgctca ggaacgagtt 1860

caagtacttc caaagaatga ccacaacctc ttcagtggaa ggtaaacaga atctggtgat 1920

tatgggtagg aaaacctggt tctccattcc tgagaagaat cgacctttaa aggacagaat 1980

taatatagtt ctcagtagag aactcaaaga accaccacga ggagctcatt ttcttgccaa 2040

aagtttggat gatgccttaa gacttattga acaaccggaa ttggcaagta aagtagacat 2100

ggtttggata gtcggaggca gttctgttta ccaggaagcc atgaatcaac caggccacct 2160

cagactcttt gtgacaagga tcatgcagga atttgaaagt gacacgtttt tcccagaaat 2220

tgatttgggg aaatataaac ttctcccaga atacccaggc gtcctctctg aggtccagga 2280

ggaaaaaggc atcaagtata agtttgaagt ctacgagaag aaagactaat agtgactcgc 2340

tttcttgctg tccaatttct attaaaggtt cctttgttcc ctaagtccaa ctactaaact 2400

gggggatatt atgaagggcc ttgagcatct ggattctgcc taataaaaaa catttatttt 2460

cattgcaatg atgtatttaa attatttctg aatattttac taaaaaggga atgtgggagg 2520

tcagtgcatt taaaacataa agaaagaaga cac 2553

<210> 266
<211> 2718
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 266
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gacaccatgg ttgagaatac cactttatcc cgcgtcaggg agaggcagtg 300

cgtaaaaaga cgcggactca tgtgaaatac tggtttttag tgcgccagat ctctataatc 360

tcgcgcaacc tattttcccc tcgaacactt tttaagccgt agataaacag gctgggacac 420

ttcacatgac cgagtacaag cccacggtgc gcctcgccac ccgcgacgac gtccccaggg 480

ccgtacgcac cctcgccgcc gcgttcgccg actaccccgc cacgcgccac accgtcgatc 540

cggaccgcca catcgagcgg gtcaccgagc tgcaagaact cttcctcacg cgcgtcgggc 600

tcgacatcgg caaggtgtgg gtcgcggacg acggcgccgc ggtggcggtc tggaccacgc 660

cggagagcgt cgaagcgggg gcggtgttcg ccgagatcgg cccgcgcatg gccgagttga 720

gcggttcccg gctggccgcg cagcaacaga tggaaggcct cctggcgccg caccggccca 780

aggagcccgc gtggttcctg gccaccgtcg gcgtgtcgcc cgaccaccag ggcaagggtc 840

tgggcagcgc cgtcgtgctc cccggagtgg aggcggccga gcgcgccggg gtgcccgcct 900

tcctggagac atccgcgccc cgcaacctcc ccttctacga gcggctcggc ttcaccgtca 960

ccgccgacgt cgaggtgccc gaaggaccgc gcacctggtg catgacccgc aagcccggtg 1020

cctgagaaac ccgtatacac cggacctttt ctcccctccc tctccactta cctttttccc 1080

ctcttcggca tgaaacaagg attattcaag tggaaacgcg atttaatatg cggctggcca 1140

ccgcggaata acggcaattg tgtatctgct ggaagccaag cctgcctagc cgatagccct 1200

tgaccgggtg tgtaggatag cccaggaacc agcaatacgc gacaggttat ggtagagtag 1260

atacctagcc aggggcaatg ggactgcatt gcatatccct aatgaaccat tgagatttct 1320

ctggtcatta cccggtgatg gttactagag gggggcctct agtactagat ctatactgcc 1380

tgatagggtc gcggctggcc gaccatgacc tgtatagtca gttgatttga gcaatatggt 1440

tcgaccattg aactgcatcg tcgccgtgtc ccaaaatatg gggattggca agaacggaga 1500

cttgccctgg cctccgctca ggaacgagtt caagtacttc caaagaatga ccacaacctc 1560

ttcagtggaa ggtaaacaga atctggtgat tatgggtagg aaaacctggt tctccattcc 1620

tgagaagaat cgacctttaa aggacagaat taatatagtt ctcagtagag aactcaaaga 1680

accaccacga ggagctcatt ttcttgccaa aagtttggat gatgccttaa gacttattga 1740

acaaccggaa ttggcaagta aagtagacat ggtttggata gtcggaggca gttctgttta 1800

ccaggaagcc atgaatcaac caggccacct cagactcttt gtgacaagga tcatgcagga 1860

atttgaaagt gacacgtttt tcccagaaat tgatttgggg aaatataaac ttctcccaga 1920

gtacccaggt gtgttaagtg aggtgcaaga ggaaaaaggt atcaagtaca agttcgaggt 1980

atatgaaaag aaggattaat ggatccgctc agacatgata agatacattg atgagtttgg 2040

acaaaccaca actagaatgc agtgataatt agactttgag tgatcttgag cctttcctag 2100

ttcatcccac cccgccccag agagatcttt gtgaaggaac cttacttctg tggtgtgaca 2160

taattggaca aactacctac agagatttaa agctctaagg taaatataaa atttttaagt 2220

gtataatgtg ttaaactact gattctaatt gtttgtgtat tttagattcc aacctatgga 2280

actgatgaat gggagcagtg gtggaatgcc tttaatgagg aaaacctgtt ttgctcagaa 2340

gaaatgccat ctagtgatga tgaggctact gctgactctc aacattctac tcctccacag 2400

acctggtgac cgtcaggaag aagattcagt gagaggacac gaggtatgtc atggttttta 2460

atcaataaat aaagaggttt tattcatcgg acagtcgttg tagcctgtaa aagactcgcc 2520

ccggaggggg ttcccccgat gtgaggggca tgcagtagta tggtgtcctg agtgtctcgg 2580

atgcgtcctt gaactcgcac tctaccgccg tgggggttaa taaagttttg ctgcgccggt 2640

agggggggag gccgaggata ataaagttgc tacgtactgg ttgaagtcta acaatctctc 2700

gggggggatcc gaagacac 2718

<210> 267
<211> 2718
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 267
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gccaccatgg ttgagaatac cactttatcc cgcgtcaggg agaggcagtg 300

cgtaaaaaga cgcggaacca tgtgaaatac tggtttttag tgcgccagat ctctataatc 360

tcgcgcaacc tattttcccc tcgaacactt tttaagccgt agataaacag gctgggacac 420

ttcacatgac cgagtacaag cccacggtgc gcctcgccac ccgcgacgac gtccccaggg 480

ccgtacgcac cctcgccgcc gcgttcgccg actaccccgc cacgcgccac accgtcgatc 540

cggaccgcca catcgagcgg gtcaccgagc tgcaagaact cttcctcacg cgcgtcgggc 600

tcgacatcgg caaggtgtgg gtcgcggacg acggcgccgc ggtggcggtc tggaccacgc 660

cggagagcgt cgaagcgggg gcggtgttcg ccgagatcgg cccgcgcatg gccgagttga 720

gcggttcccg gctggccgcg cagcaacaga tggaaggcct cctggcgccg caccggccca 780

aggagcccgc gtggttcctg gccaccgtcg gcgtgtcgcc cgaccaccag ggcaagggtc 840

tgggcagcgc cgtcgtgctc cccggagtgg aggcggccga gcgcgccggg gtgcccgcct 900

tcctggagac atccgcgccc cgcaacctcc ccttctacga gcggctcggc ttcaccgtca 960

ccgccgacgt cgaggtgccc gaaggaccgc gcacctggtg catgacccgc aagcccggtg 1020

cctgagaaac ccgtatacac cggacctttt ctcccctccc tctccactta ccttttccc 1080

ctcttcggca tgaaacaagg attattcaag tggaaacgcg atttaatatg cggctggcca 1140

ccgcggaata acggcaattg tgtatctgct ggaagccaag cctgcctagc cgatagccct 1200

tgaccgggtg tgtaggatag cccaggaacc agcaatacgc gacaggttat ggtagagtag 1260

atacctagcc aggggcaatg ggactgcatt gcatatccct aatgaaccat tgagatttct 1320

ctggtcatta cccggtgatg gttactagag gggggcctct agtactagat ctatactgcc 1380

tgatagggtc gcggctggcc gaccatgacc tgtatagtca gttgatttga gcaatatggt 1440

tcgaccattg aactgcatcg tcgccgtgtc ccaaaatatg gggattggca agaacggaga 1500

cttgccctgg cctccgctca ggaacgagtt caagtacttc caaagaatga ccacaacctc 1560

ttcagtggaa ggtaaacaga atctggtgat tatgggtagg aaaacctggt tctccattcc 1620

tgagaagaat cgacctttaa aggacagaat taatatagtt ctcagtagag aactcaaaga 1680

accaccacga ggagctcatt ttcttgccaa aagtttggat gatgccttaa gacttattga 1740

acaaccggaa ttggcaagta aagtagacat ggtttggata gtcggaggca gttctgttta 1800

ccaggaagcc atgaatcaac caggccacct cagactcttt gtgacaagga tcatgcagga 1860

atttgaaagt gacacgtttt tcccagaaat tgatttgggg aaatataaac ttctcccaga 1920

gtacccaggt gtgttaagtg aggtgcaaga ggaaaaaggt atcaagtaca agttcgaggt 1980

atatgaaaag aaggattaat ggatccgctc agacatgata agatacattg atgagtttgg 2040

acaaaccaca actagaatgc agtgataatt agactttgag tgatcttgag cctttcctag 2100

ttcatcccac cccgccccag agagatcttt gtgaaggaac cttacttctg tggtgtgaca 2160

taattggaca aactacctac agagatttaa agctctaagg taaatataaa atttttaagt 2220

gtataatgtg ttaaactact gattctaatt gtttgtgtat tttagattcc aacctatgga 2280

actgatgaat gggagcagtg gtggaatgcc tttaatgagg aaaacctgtt ttgctcagaa 2340

gaaatgccat ctagtgatga tgaggctact gctgactctc aacattctac tcctccacag 2400

acctggtgac cgtcaggaag aagattcagt gagaggacac gaggtatgtc atggttttta 2460

atcaataaat aaagaggttt tattcatcgg acagtcgttg tagcctgtaa aagactcgcc 2520

ccggaggggg ttcccccgat gtgaggggca tgcagtagta tggtgtcctg agtgtctcgg 2580

atgcgtcctt gaactcgcac tctaccgccg tgggggttaa taaagttttg ctgcgccggt 2640

aggggggggag gccgaggata ataaagttgc tacgtactgg ttgaagtcta acaatctctc 2700

gggggggatcc gaagacac 2718

<210> 268
<211> 2979
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 268
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggacacaag 240

acaggcttgc gccaccatgg ttgagaatac cactttatcc cgcgtcaggg agaggcagtg 300

cgtaaaaaga cgcggaacca tgtgaaatac tggtttttag tgcgccagat ctctataatc 360

tcgcgcaacc tattttcccc tcgaacactt tttaagccgt agataaacag gctgggacac 420

ttcacatgac cgagtacaag cccacggtgc gcctcgccac ccgcgacgac gtccccaggg 480

ccgtacgcac cctcgccgcc gcgttcgccg actaccccgc cacgcgccac accgtcgatc 540

cggaccgcca catcgagcgg gtcaccgagc tgcaagaact cttcctcacg cgcgtcgggc 600

tcgacatcgg caaggtgtgg gtcgcggacg acggcgccgc ggtggcggtc tggaccacgc 660

cggagagcgt cgaagcgggg gcggtgttcg ccgagatcgg cccgcgcatg gccgagttga 720

gcggttcccg gctggccgcg cagcaacaga tggaaggcct cctggcgccg caccggccca 780

aggagcccgc gtggttcctg gccaccgtcg gcgtgtcgcc cgaccaccag ggcaagggtc 840

tgggcagcgc cgtcgtgctc cccggagtgg aggcggccga gcgcgccggg gtgcccgcct 900

tcctggagac atccgcgccc cgcaacctcc ccttctacga gcggctcggc ttcaccgtca 960

ccgccgacgt cgaggtgccc gaaggaccgc gcacctggtg catgacccgc aagcccggtg 1020

cctgagaaac ccgtatacac cggacctttt ctcccctccc tctccactta ccttttccc 1080

ctcttcggca tgaaacaagg attattcaag tggaaacgcg atttaatatg cggctggcca 1140

ccgcggaata acggcaattg tgtatctgct ggaagccaag cctgcctagc cgatagccct 1200

tgaccgggtg tgtaggatag cccaggaacc agcaatacgc gacaggttat ggtagagtag 1260

atacctagcc aggggcaatg ggactgcatt gcatatccct aatgaaccat tgagatttct 1320

ctggtcatta cccggtgatg gttactagag gggggcctct agtactagat ctatactgcc 1380

tgatagggtc gcggctggcc gaccatgacc tgtatagtca gttgatttga gcaatatggt 1440

tcgaccattg aactgcatcg tcgccgtgtc ccaaaatatg gggattggca agaacggaga 1500

cttgccctgg cctccgctca ggaacgagtt caagtacttc caaagaatga ccacaacctc 1560

ttcagtggaa ggtaaacaga atctggtgat tatgggtagg aaaacctggt tctccattcc 1620

tgagaagaat cgacctttaa aggacagaat taatatagtt ctcagtagag aactcaaaga 1680

accaccacga ggagctcatt ttcttgccaa aagtttggat gatgccttaa gacttattga 1740

acaaccggaa ttggcaagta aagtagacat ggtttggata gtcggaggca gttctgttta 1800

ccaggaagcc atgaatcaac caggccacct cagactcttt gtgacaagga tcatgcagga 1860

atttgaaagt gacacgtttt tcccagaaat tgatttgggg aaatataaac ttctcccaga 1920

gtacccaggt gtgttaagtg aggtgcaaga ggaaaaaggt atcaagtaca agttcgaggt 1980

atatgaaaag aaggattaat ggatccgctc agacatgata agatacattg atgagtttgg 2040

acaaaccaca actagaatgc agtgataatt agactttgag tgatcttgag cctttcctag 2100

ttcatcccac cccgccccag agagatcttt gtgaaggaac cttacttctg tggtgtgaca 2160

taattggaca aactacctac agagatttaa agctctaagg taaatataaa atttttaagt 2220

gtataatgtg ttaaactact gattctaatt gtttgtgtat tttagattcc aacctatgga 2280

actgatgaat gggagcagtg gtggaatgcc tttaatgagg aaaacctgtt ttgctcagaa 2340

gaaatgccat ctagtgatga tgaggctact gctgactctc aacattctac tcctccaaaa 2400

aagaagagaa aggtagaaga tcccaaggac tttccttcag aattgctaag ttttttgagt 2460

catgctgtgt ttagtaatag aactcttgct tgctttgcta tttacaccac aaaggaaaaa 2520

gctgcactgc tatacaagaa aattatggaa aaatattctg taacctttat aagtaggcat 2580

aacagttata atcataacat actgtttttt cttactccac acaggcatag agtgtctgct 2640

attaataact atgctcaaaa attgtgtacc tttagctttt taatttgtaa aggggttaat 2700

aaggaatatt tgatgtatag tgccttgact agagatcata atcagccata ccacatttgt 2760

agaggtttta cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat 2820

gaatgcaatt gttgttgtta acttgtttat tgcagcttat aatggttaca aataaagcaa 2880

tagcatcaca aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc 2940

caaactcatc aatgtatctt atcatgtctg ggaagacac 2979

<210> 269
<211> 2202
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 269
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgaggt 840

taaaaaattc cgccccccccc ctaacgttac tggccgaagc cgcttggaat aaggccggtg 900

tgcgtttgtc tatatgttat tttccaccat attgccgtct tttggcaatg tgagggcccg 960

gaaacctggc cctgtcttct tgacgagcat tcctaggggt ctttcccctc tcgccaaagg 1020

aatgcaaggt ctgttgaatg tcgtgaagga agcagttcct ctggaagctt cttgaagaca 1080

aacaacgtct gtagcgaccc tttgcaggca gcggaacccc ccacctggcg acaggtgcct 1140

ctgcggccaa aagccacgtg tataagatac acctgcaaag gcggcacaac cccagtgcca 1200

cgttgtgagt tggatagttg tggaaagagt caaatggctc tcctcaagcg tattcaacaa 1260

ggggctgaag gatgcccaga aggtacccca ttgtatggga tctgatctgg ggcctcggta 1320

cacatgcttt acatgtgttt agtcgaggtt aaaaaacgtc taggcccccc gaaccacggg 1380

gacgtggttt tcctttgaaa aacacgatga taatatggtt cgaccattga actgcatcgt 1440

cgccgtgtcc caaaatatgg ggattggcaa gaacggagac ttgccctggc ctccgctcag 1500

gaacgagttc aagtacttcc aaagaatgac cacaacctct tcagtggaag gtaaacagaa 1560

tctggtgatt atgggtagga aaacctggtt ctccattcct gagaagaatc gacctttaaa 1620

ggacagaatt aatatagttc tcagtagaga actcaaagaa ccaccacgag gagctcattt 1680

tcttgccaaa agtttggatg atgccttaag acttattgaa caaccggaat tggcaagtaa 1740

agtagacatg gtttggatag tcggaggcag ttctgtttac caggaagcca tgaatcaacc 1800

aggccacctc agactctttg tgacaaggat catgcaggaa tttgaaagtg acacgttttt 1860

cccagaaatt gatttgggga aatataaact tctcccagaa tacccaggcg tcctctctga 1920

ggtccaggag gaaaaaggca tcaagtataa gtttgaagtc tacgagaaga aagactaata 1980

gtgactcgct ttcttgctgt ccaatttcta ttaaaggttc ctttgttccc taagtccaac 2040

tactaaactg ggggatatta tgaagggcct tgagcatctg gattctgcct aataaaaaac 2100

atttattttc attgcaatga tgtatttaaa ttatttctga atattttact aaaaagggaa 2160

tgtgggaggt cagtgcattt aaaacataaa gaaagaagac ac 2202

<210> 270
<211> 2035
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 270
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgagaa 840

acccgtatac accggacctt ttctcccctc cctctccact tacctttttc ccctcttcgg 900

catgaaacaa ggattattca agtggaaacg cgatttaata tgcggctggc caccgcggaa 960

taacggcaat tgtgtatctg ctggaagcca agcctgccta gccgatagcc cttgaccggg 1020

tgtgtaggat agcccaggaa ccagcaatac gcgacaggtt atggtagagt agatacctag 1080

ccaggggcaa tgggactgca ttgcatatcc ctaatgaacc attgagattt ctctggtcat 1140

tacccggtga tggttactag agggggggcct ctagtactag atctatactg cctgataggg 1200

tcgcggctgg ccgaccatga cctgtatagt cagttgattt gagcaatatg gttcgaccat 1260

tgaactgcat cgtcgccgtg tcccaaaata tggggattgg caagaacgga gacttgccct 1320

ggcctccgct caggaacgag ttcaagtact tccaaagaat gaccacaacc tcttcagtgg 1380

aaggtaaaca gaatctggtg attatgggta ggaaaacctg gttctccatt cctgagaaga 1440

atcgaccttt aaaggacaga attaatatag ttctcagtag agaactcaaa gaaccaccac 1500

gaggagctca ttttcttgcc aaaagtttgg atgatgcctt aagacttatt gaacaaccgg 1560

aattggcaag taaagtagac atggtttgga tagtcggagg cagttctgtt taccaggaag 1620

ccatgaatca accaggccac ctcagactct ttgtgacaag gatcatgcag gaatttgaaa 1680

gtgacacgtt tttcccagaa attgatttgg ggaaatataa acttctccca gaatacccag 1740

gcgtcctctc tgaggtccag gaggaaaaag gcatcaagta taagtttgaa gtctacgaga 1800

agaaagacta atagtgactc gctttcttgc tgtccaattt ctattaaagg ttcctttgtt 1860

ccctaagtcc aactactaaa ctgggggata ttatgaaggg ccttgagcat ctggattctg 1920

cctaataaaa aacatttatt ttcattgcaa tgatgtattt aaattatttc tgaatatttt 1980

actaaaaagg gaatgtggga ggtcagtgca tttaaaacat aaagaaagaa gacac 2035

<210> 271
<211> 2366
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 271
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgatta 840

aaacagcctg tgggttgtac ccacccacag ggcccactgg gcgctagcac tctggtacta 900

cggtaccttt gtgtgcctgt tttatacccc tccccctact gaaacttaga agcaattcat 960

accgatcaat agtgggcgtg gcacaccagc cgtgtctaga tcaagcactc ctgtttcccc 1020

ggaccgagta tcaatagact gctcacgcgg ttgaaggaga aaacgttcgt tatccggcta 1080

actacttcga aaaacctagt aacaccatga aagttgcgga gtgtttcact cagcacttcc 1140

ccagtgtaga tcaggtcgat gagtcaccgc attcctcacg ggcgaccgtg gcggtggctg 1200

cgctggcggc ctgcctatgg ggtgacccat aggacgctct aatacagaca tggtgcgaag 1260

agtctattga gctagttagt agtcctccgg cccctgaatg cggataatcc taactgtgga 1320

gcagataccc acgaaccagt gggcagtctg tcgtaacggg caactccgca gcggaaccga 1380

ctactttggg tgtccgtgtt tccttttatt ccaaatctgg ctgcttatgg tgacaattga 1440

gagattgttg ccatatagct attggattgg ccatccggtg aataatagag cgataatata 1500

tttgtttgtt ggattcgtgc cacttagtct gaaagttttg agaacactca actacgtttt 1560

attgctgaat agtgcaagat ggttcgacca ttgaactgca tcgtcgccgt gtcccaaaat 1620

atggggattg gcaagaacgg agacttgccc tggcctccgc tcaggaacga gttcaagtac 1680

ttccaaagaa tgaccacaac ctcttcagtg gaaggtaaac agaatctggt gattatgggt 1740

aggaaaacct ggttctccat tcctgagaag aatcgacctt taaaggacag aattaatata 1800

gttctcagta gagaactcaa agaaccacca cgaggagctc attttcttgc caaaagtttg 1860

gatgatgcct taagacttat tgaacaaccg gaattggcaa gtaaagtaga catggtttgg 1920

atagtcggag gcagttctgt ttaccaggaa gccatgaatc aaccaggcca cctcagactc 1980

tttgtgacaa ggatcatgca ggaatttgaa agtgacacgt ttttcccaga aattgatttg 2040

gggaaatata aacttctccc agaataccca ggcgtcctct ctgaggtcca ggaggaaaaa 2100

ggcatcaagt ataagtttga agtctacgag aagaaagact aatagtgact cgctttcttg 2160

ctgtccaatt tctattaaag gttcctttgt tccctaagtc caactactaa actgggggat 2220

attatgaagg gccttgagca tctggattct gcctaataaa aaacatttat tttcattgca 2280

atgatgtatt taaattattt ctgaatattt tactaaaaag ggaatgtggg aggtcagtgc 2340

atttaaaaca taaagaaaga agacac 2366

<210> 272
<211> 2044
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 272
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgaggg 840

ttttacgaaa cccgtataca ccagaccttt tctcccctcc ccctccacct acctttccc 900

cctctttgga ccgaaacaag gacacgtaag tggaaacgcg attttatatg tggttggcca 960

ccacggaata acggcaattg tctacatgtg ggaagtgcaa cctccctagc cgataacccc 1020

tgaccgggtg tgtaggatag gaaaggtgcc cactgtgggc gacaggttat ggtagagtgg 1080

atacctagcc aggggcaatg ggactgcttt gcatatccct aatgaagtat tgagatttct 1140

ctgctcatta cccggtgatg gttgtgtggg gggggcccca tacactagat ccatactgcc 1200

tgatagggtc gcggctggcc gaccataacc tgtatagtca gttgaattca gccaagatgg 1260

ttcgaccatt gaactgcatc gtcgccgtgt cccaaaatat ggggattggc aagaacggag 1320

acttgccctg gcctccgctc aggaacgagt tcaagtactt ccaaagaatg accacaacct 1380

cttcagtgga aggtaaacag aatctggtga ttatgggtag gaaaacctgg ttctccattc 1440

ctgagaagaa tcgaccttta aaggacagaa ttaatatagt tctcagtaga gaactcaaag 1500

aaccaccacg aggagctcat tttcttgcca aaagtttgga tgatgcctta agacttattg 1560

aacaaccgga attggcaagt aaagtagaca tggtttggat agtcggaggc agttctgttt 1620

accaggaagc catgaatcaa ccaggccacc tcagactctt tgtgacaagg atcatgcagg 1680

aatttgaaag tgacacgttt ttcccagaaa ttgatttggg gaaatataaa cttctcccag 1740

aatacccagg cgtcctctct gaggtccagg aggaaaaagg catcaagtat aagtttgaag 1800

tctacgagaa gaaagactaa tagtgactcg ctttcttgct gtccaatttc tattaaaggt 1860

tcctttgttc cctaagtcca actactaaac tgggggatat tatgaagggc cttgagcatc 1920

tggattctgc ctaataaaaa acatttattt tcattgcaat gatgtattta aattatttct 1980

gaatatttta ctaaaaaggg aatgtgggag gtcagtgcat ttaaaacata aagaaagaag 2040

acac 2044

<210> 273
<211> 2277

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 273
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgagac 840

gaaactacca tcatgcctcc ccgattatgt gatgctttct gccctgctgg gtggagcatc 900

ctcgggttga gaaaaccttc ttccttttc cttggacccc ggtcccccgg tctaagccgc 960

ttggaataag acagggttat cttcacctct tccttcttct acttcatagt gttctatact 1020

atgaaagggt atgtgtcgcc ccttccttct ttggagaaca cgcgcggcgg tctttccgtc 1080

tctcgaaaag cgcgtgtgcg acatgcagag aaccgtgaag aaagcagttt gcggactagc 1140

tttagtgccc acaagaaaac agctgtagcg accacacaaa ggcagcggac ccccctcct 1200

ggcaacagga gcctctgcgg ccaaaagcca cgtggataag atccaccttt gtgtgcggca 1260

caaccccagt gccctggttt cttggtgaca cttcagtgaa aacgcaaatg gcgatctgaa 1320

gcgcctctgt aggaaagcca agaatgtcca ggaggtaccc cttccctcgg gaagggatct 1380

gacctggaga cacatcacat gtgctttaca cctgtgcttg tgtttaaaaa ttgtcacagc 1440

tttcccaaac caagtggtct tggttttcac tctttaaact gatttcacta tggttcgacc 1500

attgaactgc atcgtcgccg tgtcccaaaa tatggggatt ggcaagaacg gagacttgcc 1560

ctggcctccg ctcaggaacg agttcaagta cttccaaaga atgaccacaa cctcttcagt 1620

ggaaggtaaa cagaatctgg tgattatggg taggaaaacc tggttctcca ttcctgagaa 1680

gaatcgacct ttaaaggaca gaattaatat agttctcagt agagaactca aagaaccacc 1740

acgaggagct cattttcttg ccaaaagttt ggatgatgcc ttaagactta ttgaacaacc 1800

ggaattggca agtaaagtag acatggtttg gatagtcgga ggcagttctg tttaccagga 1860

agccatgaat caaccaggcc acctcagact ctttgtgaca aggatcatgc aggaatttga 1920

aagtgacacg tttttcccag aaattgattt ggggaaatat aaacttctcc cagaataccc 1980

aggcgtcctc tctgaggtcc aggaggaaaa aggcatcaag tataagtttg aagtctacga 2040

gaagaaagac taatagtgac tcgctttctt gctgtccaat ttctattaaa ggttcctttg 2100

ttccctaagt ccaactacta aactggggga tattatgaag ggccttgagc atctggattc 2160

tgcctaataa aaaacattta ttttcattgc aatgatgtat ttaaattatt tctgaatatt 2220

ttactaaaaa gggaatgtgg gaggtcagtg catttaaaac ataaagaaag aagacac 2277

<210> 274
<211> 2291
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 274
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgagtt 840

ttacaccccc ttaccctaat agcaacttag aaggctcaat gcatctacga ccaatagcag 900

gcgcgacggc accaagtcgt gtctcggtca agcacttctg tttccccggg accgagtatc 960

aatagactgc tcacgcggtt gaaggagaaa gcgttcgtta cccggccatc tacttcgaga 1020

agcctagtaa caccatgaaa gttgcagagc gtttcgctca gcacttcccc cgtgtagatc 1080

aggccgatga gtcactgcaa ccctcacggg cgaccgtggc agtggctgcg ttggcggcct 1140

gcccatggga ttacccatgg gacgctctaa tacagacatg gtgtgaagaa cctattgagc 1200

tagttggtag tcctccggcc cctgaatgcg gctaatccta actgcggagc atacaccctc 1260

aatccagggg gcagtgtgtc gtaacgggca actctgcagc ggaaccgact actttgggtg 1320

tccgtgtttc cttttattct tattatggct gcttatggtg acaattgaga gattgttgcc 1380

atatagctat tggattggcc atccggtgag caatagagcg attatttact cttttgttgg 1440

atttgtgcca ttggatcaca ccacaatcat cacactaaag tatattttac tattaaatac 1500

agcaaaatgg ttcgaccatt gaactgcatc gtcgccgtgt cccaaaatat ggggattggc 1560

aagaacggag acttgccctg gcctccgctc aggaacgagt tcaagtactt ccaaagaatg 1620

accacaacct cttcagtgga aggtaaacag aatctggtga ttatgggtag gaaaacctgg 1680

ttctccattc ctgagaagaa tcgaccttta aaggacagaa ttaatatagt tctcagtaga 1740

gaactcaaag aaccaccacg aggagctcat tttcttgcca aaagtttgga tgatgcctta 1800

agacttattg aacaaccgga attggcaagt aaagtagaca tggtttggat agtcggaggc 1860

agttctgttt accaggaagc catgaatcaa ccaggccacc tcagactctt tgtgacaagg 1920

atcatgcagg aatttgaaag tgacacgttt ttcccagaaa ttgatttggg gaaatataaa 1980

cttctcccag agtacccagg tgtgttaagt gaggtgcaag aggaaaaagg tatcaagtac 2040

aagttcgagg tatatgaaaa gaaggattaa tgactcgctt tcttgctgtc caatttctat 2100

taaaggttcc tttgttccct aagtccaact actaaactgg gggatattat gaagggcctt 2160

gagcatctgg attctgccta ataaaaaaca tttattttca ttgcaatgat gtatttaaat 2220

tatttctgaa tattttacta aaaagggaat gtgggaggtc agtgcattta aaacataaag 2280

aaagaagaca c 2291

<210> 275
<211> 2366
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 275
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgatta 840

aaacagcctg tgggttgtac ccacccacag ggcccactgg gcgctagcac tctggtacta 900

cggtaccttt gtgtgcctgt tttatacccc tccccctact gaaacttaga agcaattcat 960

accgatcaat agtgggcgtg gcacaccagc cgtgtctaga tcaagcactc ctgtttcccc 1020

ggaccgagta tcaatagact gctcacgcgg ttgaaggaga aaacgttcgt tatccggcta 1080

actacttcga aaaacctagt aacaccatga aagttgcgga gtgtttcact cagcacttcc 1140

ccagtgtaga tcaggtcgat gagtcaccgc attcctcacg ggcgaccgtg gcggtggctg 1200

cgctggcggc ctgcctatgg ggtgacccat aggacgctct aatacagaca tggtgcgaag 1260

agtctattga gctagttagt agtcctccgg cccctgaatg cggataatcc taactgtgga 1320

gcagataccc acgaaccagt gggcagtctg tcgtaacggg caactccgca gcggaaccga 1380

ctactttggg tgtccgtgtt tccttttatt ccaaatctgg ctgcttatgg tgacaattga 1440

gagattgttg ccatatagct attggattgg ccatccggtg aataatagag cgataatata 1500

tttgtttgtt ggattcgtgc cacttagtct gaaagaggtt aaaacattac aattcattgt 1560

taagttgaat acagcaaaat ggttcgacca ttgaactgca tcgtcgccgt gtcccaaaat 1620

atggggattg gcaagaacgg agacttgccc tggcctccgc tcaggaacga gttcaagtac 1680

ttccaaagaa tgaccacaac ctcttcagtg gaaggtaaac agaatctggt gattatgggt 1740

aggaaaacct ggttctccat tcctgagaag aatcgacctt taaaggacag aattaatata 1800

gttctcagta gagaactcaa agaaccacca cgaggagctc attttcttgc caaaagtttg 1860

gatgatgcct taagacttat tgaacaaccg gaattggcaa gtaaagtaga catggtttgg 1920

atagtcggag gcagttctgt ttaccaggaa gccatgaatc aaccaggcca cctcagactc 1980

tttgtgacaa ggatcatgca ggaatttgaa agtgacacgt ttttcccaga aattgatttg 2040

gggaaatata aacttctccc agaataccca ggcgtcctct ctgaggtcca ggaggaaaaa 2100

ggcatcaagt ataagtttga agtctacgag aagaaagact aatagtgact cgctttcttg 2160

ctgtccaatt tctattaaag gttcctttgt tccctaagtc caactactaa actgggggat 2220

attatgaagg gccttgagca tctggattct gcctaataaa aaacatttat tttcattgca 2280

atgatgtatt taaattattt ctgaatattt tactaaaaag ggaatgtggg aggtcagtgc 2340

atttaaaaca taaagaaaga agacac 2366

<210> 276
<211> 2308
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 276
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgcctgatta 840

aaacagcctg tgggttgtac ccacccacag ggcccactgg gcgctagcac tctggtacta 900

cggtaccttt gtgtgcctgt tttatacccc tccccctact gaaacttaga agcaattcat 960

accgatcaat agtgggcgtg gcacaccagc cgtgtctaga tcaagcactc ctgtttcccc 1020

ggaccgagta tcaatagact gctcacgcgg ttgaaggaga aaacgttcgt tatccggcta 1080

actacttcga aaaacctagt aacaccatga aagttgcgga gtgtttcact cagcacttcc 1140

ccagtgtaga tcaggtcgat gagtcaccgc attcctcacg ggcgaccgtg gcggtggctg 1200

cgctggcggc ctgcctatgg ggtgacccat aggacgctct aatacagaca tggtgcgaag 1260

agtctattga gctagttagt agtcctccgg cccctgaatg cggataatcc taactgtgga 1320

gcagataccc acgaaccagt gggcagtctg tcgtaacggg caactccgca gcggaaccga 1380

ctactttggg tgtccgtgtt tccttttatt ccaaatctgg ctgcttatgg tgacaattga 1440

gagattgttg ccatatagct attggattgg ccatccggtg aataatagag cgataatata 1500

tttgtttgtt ggattcgtgc cacatggttc gaccattgaa ctgcatcgtc gccgtgtccc 1560

aaaatatggg gattggcaag aacggagact tgccctggcc tccgctcagg aacgagttca 1620

agtacttcca aagaatgacc acaacctctt cagtggaagg taaacagaat ctggtgatta 1680

tgggtaggaa aacctggttc tccattcctg agaagaatcg acctttaaag gacagaatta 1740

atatagttct cagtagagaa ctcaaagaac caccacgagg agctcatttt cttgccaaaa 1800

gtttggatga tgccttaaga cttattgaac aaccggaatt ggcaagtaaa gtagacatgg 1860

tttggatagt cggaggcagt tctgtttacc aggaagccat gaatcaacca ggccacctca 1920

gactctttgt gacaaggatc atgcaggaat ttgaaagtga cacgtttttc ccagaaattg 1980

atttggggaa atataaactt ctcccagagt acccaggtgt gttaagtgag gtgcaagagg 2040

aaaaaggtat caagtacaag ttcgaggtat atgaaaagaa ggattaatga ctcgctttct 2100

tgctgtccaa tttctattaa aggttccttt gttccctaag tccaactact aaactggggg 2160

atattatgaa gggccttgag catctggatt ctgcctaata aaaaacattt attttcattg 2220

caatgatgta tttaaattat ttctgaatat tttactaaaa agggaatgtg ggaggtcagt 2280

gcatttaaaa cataaagaaa gaagacac 2308

<210> 277
<211> 1920
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 277
aagtcttctt aattaattgg cgaaaacacg cagatgcagt cggggcggcg cggtcccagg 60

tccacttcgc atattaaggt gacgcgtgtg gcctcgaaca cagagcgact ctgcagggtg 120

gcatgaccga gtacaagccc acggtgcgcc tcgccacccg cgacgacgtc cccagggccg 180

tacgcaccct cgccgccgcg ttcgccgact accccgccac gcgccacacc gtcgatccgg 240

accgccacat cgagcgggtc accgagctgc aagaactctt cctcacgcgc gtcgggctcg 300

acatcggcaa ggtgtgggtc gcggacgacg gcgccgcggt ggcggtctgg accacgccgg 360

agagcgtcga agcgggggcg gtgttcgccg agatcggccc gcgcatggcc gagttgagcg 420

gttcccggct ggccgcgcag caacagatgg aaggcctcct ggcgccgcac cggcccaagg 480

agcccgcgtg gttcctggcc accgtcggcg tgtcgcccga ccaccagggc aagggtctgg 540

gcagcgccgt cgtgctcccc ggagtggagg cggccgagcg cgccggggtg cccgccttcc 600

tggagacatc cgcgccccgc aacctcccct tctacgagcg gctcggcttc accgtcaccg 660

ccgacgtcga ggtgcccgaa ggaccgcgca cctggtgcat gacccgcaag cccggtgcct 720

gagaaacccg tatacaccgg acctttttctc ccctccctct ccacttacct ttttcccctc 780

ttcggcatga aacaaggatt attcaagtgg aaacgcgatt taatatgcgg ctggccaccg 840

cggaataacg gcaattgtgt atctgctgga agccaagcct gcctagccga tagcccttga 900

ccgggtgtgt aggatagccc aggaaccagc aatacgcgac aggttatggt agagtagata 960

cctagccagg ggcaatggga ctgcattgca tatccctaat gaaccattga gatttctctg 1020

gtcattaccc ggtgatggtt actagagggg ggcctctagt actagatcta tactgcctga 1080

tagggtcgcg gctggccgac catgacctgt atagtcagtt gatttgagca atatggttcg 1140

accattgaac tgcatcgtcg ccgtgtccca aaatatgggg attggcaaga acggagactt 1200

gccctggcct ccgctcagga acgagttcaa gtacttccaa agaatgacca caacctcttc 1260

agtggaaggt aaacagaatc tggtgattat gggtaggaaa acctggttct ccattcctga 1320

gaagaatcga cctttaaagg acagaattaa tatagttctc agtagagaac tcaaagaacc 1380

accacgagga gctcattttc ttgccaaaag tttggatgat gccttaagac ttattgaaca 1440

accggaattg gcaagtaaag tagacatggt ttggatagtc ggaggcagtt ctgtttacca 1500

ggaagccatg aatcaaccag gccacctcag actctttgtg acaaggatca tgcaggaatt 1560

tgaaagtgac acgtttttcc cagaaattga tttggggaaa tataaacttc tcccagaata 1620

cccaggcgtc ctctctgagg tccaggagga aaaaggcatc aagtataagt ttgaagtcta 1680

cgagaagaaa gactaatagt gactcgcttt cttgctgtcc aatttctatt aaaggttcct 1740

ttgttcccta agtccaacta ctaaactggg ggatattatg aagggccttg agcatctgga 1800

ttctgcctaa taaaaaacat ttattttcat tgcaatgatg tatttaaatt atttctgaat 1860

attttactaa aaagggaatg tgggaggtca gtgcatttaa aacataaaga aagaagacac 1920

<210> 278
<211> 1709
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 278
aagtcttctt aattaacagc tgcttcatcc ccgtggcccg ttgctcgcgt ttgctggcgg 60

tgtccccgga agaaatatat ttgcatgtct ttagttctat gatgacacaa accccgccca 120

gcgtcttgtc attggcgaaa acacgcagat gcagtcgggg cggcgcggtc ccaggtccac 180

ttcgcatatt aaggtgacgc gtgtggcctc gaacacagag cgactctgca gggtggcatg 240

accgagtaca agcccacggt gcgcctcgcc acccgcgacg acgtccccag ggccgtacgc 300

accctcgccg ccgcgttcgc cgactacccc gccacgcgcc acaccgtcga tccggaccgc 360

cacatcgagc gggtcaccga gctgcaagaa ctcttcctca cgcgcgtcgg gctcgacatc 420

ggcaaggtgt gggtcgcgga cgacggcgcc gcggtggcgg tctggaccac gccggagagc 480

gtcgaagcgg gggcggtgtt cgccgagatc ggcccgcgca tggccgagtt gagcggttcc 540

cggctggccg cgcagcaaca gatggaaggc ctcctggcgc cgcaccggcc caaggagccc 600

gcgtggttcc tggccaccgt cggcgtgtcg cccgaccacc agggcaaggg tctgggcagc 660

gccgtcgtgc tccccggagt ggaggcggcc gagcgcgccg gggtgcccgc cttcctggag 720

acatccgcgc cccgcaacct ccccttctac gagcggctcg gcttcaccgt caccgccgac 780

gtcgaggtgc ccgaaggacc gcgcacctgg tgcatgaccc gcaagcccgg tgccggtaca 840

tctgagggca ggggaagtct gctaacatgc ggggacgtgg aggaaaatcc cggccccatg 900

gttcgaccat tgaactgcat cgtcgccgtg tcccaaaata tggggattgg caagaacgga 960

gatcttccct ggcctccgct caggaacgag ttcaagtact tccaaagaat gaccacaacc 1020

tcttcagtgg aaggtaaaca gaatctggtg attatgggta ggaaaacctg gttctccatt 1080

cctgagaaga atcgaccttt aaaggacaga attaatatag ttctcagtag agaactcaaa 1140

gaaccaccac gaggagctca ttttcttgcc aaaagtttgg atgatgcctt aagacttatt 1200

gaacaaccgg aattggcaag taaagtagac atggtttgga tagtcggagg cagttctgtt 1260

taccaggaag ccatgaatca accaggccac ctcagactct ttgtgacaag gatcatgcag 1320

gaatttgaaa gtgacacgtt tttcccagaa attgatttgg ggaaatataa acttctccca 1380

gaatacccag gcgtcctctc tgaggtccag gaggaaaaag gcatcaagta taagtttgaa 1440

gtctacgaga agaaagacta atggatccgc tcagacatga taagatacat tgatgagttt 1500

ggacaaacca caactagaat gcagtgaaaa aaatgcttta tttgtgaaat ttgtgatgct 1560

attgctttat ttgtaaccat tataagctgc aataaacaag ttaacaacaa caattgcatt 1620

cattttatgt ttcaggttca gggggaggtg tgggaggttt tttaaagcaa gtaaaacctc 1680

tacaaatgtg gtaggcgcgc cgaagacaa 1709

<210> 279
<211> 1731
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 279
taaatgcact gacctcccac attccctttt tagtaaaata ttcagaaata atttaaatac 60

atcattgcaa tgaaaataaa tgtttttttat taggcagaat ccagatgctc aaggcccttc 120

ataatatccc ccagtttagt agttggactt agggaacaaa ggaaccttta atagaaattg 180

gacagcaaga aagcgagtta tcattagtct ttcttctcgt agacttcaaa cttatacttg 240

atgccttttt cctcctggac ctcagagagg acgcctgggt attctgggag aagtttatat 300

ttccccaaat caatttctgg gaaaaacgtg tcactttcaa attcctgcat gatccttgtc 360

acaaagagtc tgaggtggcc tggttgattc atggcttcct ggtaaacaga actgcctccg 420

actatccaaa ccatgtctac tttacttgcc aattccggtt gttcaataag tcttaaggca 480

tcatccaaac ttttggcaag aaaatgagct cctcgtggtg gttctttgag ttctctactg 540

agaactatat taattctgtc ctttaaaggt cgattcttct caggaatgga gaaccaggtt 600

ttcctaccca taatcaccag attctgttta ccttccactg aagaggttgt ggtcattctt 660

tggaagtact tgaactcgtt cctgagcgga ggccagggca agtctccgtt cttgccaatc 720

cccatatttt gggacacggc gacgatgcag ttcaatggtc gaaccatggg gccgggattt 780

tcctccacgt ccccgcatgt tagcagactt cccctgccct cagatgtacc ggcaccgggc 840

ttgcgggtca tgcaccaggt gcgcggtcct tcgggcacct cgacgtcggc ggtgacggtg 900

aagccgagcc gctcgtagaa ggggaggttg cggggcgcgg atgtctccag gaaggcgggc 960

accccggcgc gctcggccgc ctccactccg gggagcacga cggcgctgcc cagacccttg 1020

ccctggtggt cgggcgacac gccgacggtg gccaggaacc acgcgggctc cttgggccgg 1080

tgcggcgcca ggaggccttc catctgttgc tgcgcggcca gccgggaacc gctcaactcg 1140

gccatgcgcg ggccgatctc ggcgaacacc gcccccgctt cgacgctctc cggcgtggtc 1200

cagaccgcca ccgcggcgcc gtcgtccgcg acccacacct tgccgatgtc gagcccgacg 1260

cgcgtgagga agagttcttg cagctcggtg acccgctcga tgtggcggtc cggatcgacg 1320

gtgtggcgcg tggcggggta gtcggcgaac gcggcggcga gggtgcgtac ggccctgggg 1380

acgtcgtcgc gggtggcgag gcgcaccgtg ggcttgtact cggtcatggt ggcggctcta 1440

gacagcttgg gtgtacctgc gaagcccctg agacggacgt gcgctccgga ggcttgcaga 1500

atgcggaaca ccgcgcgggc aggaacaggg cccacactac cgccccacac cccgcctccc 1560

gcaccgcccc ttcccggccg ctgctctcag aaagcgaagg agcaaagctg ctattggccg 1620

ctgccccaaa ggcctacccg cttccattgc tcagcggtgc tgtccatctg cacgagacta 1680

gtgagtcgtg ctacttccat ttgtcacgtc ctgcacgacg cgagctgcgg g 1731

<210> 280
<211> 2001
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 280
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag ttatcattag tctttcttct 240

cgtagacttc aaacttatac ttgatgcctt tttcctcctg gacctcagag aggacgcctg 300

ggtattctgg gagaagttta tatttcccca aatcaatttc tgggaaaaac gtgtcacttt 360

caaattcctg catgatcctt gtcacaaaga gtctgaggtg gcctggttga ttcatggctt 420

cctggtaaac agaactgcct ccgactatcc aaaccatgtc tactttactt gccaattccg 480

gttgttcaat aagtcttaag gcatcatcca aacttttggc aagaaaatga gctcctcgtg 540

gtggttcttt gagttctcta ctgagaacta tattaattct gtcctttaaa ggtcgattct 600

tctcaggaat ggagaaccag gttttcctac ccataatcac cagattctgt ttaccttcca 660

ctgaagaggt tgtggtcatt ctttggaagt acttgaactc gttcctgagc ggaggccagg 720

gcaagtctcc gttcttgcca atccccatat tttgggacac ggcgacgatg cagttcaatg 780

gtcgaaccat ggggccggga ttttcctcca cgtccccgca tgttagcaga cttcccctgc 840

cctcagatgt accggcaccg ggcttgcggg tcatgcacca ggtgcgcggt ccttcgggca 900

cctcgacgtc ggcggtgacg gtgaagccga gccgctcgta gaaggggagg ttgcggggcg 960

cggatgtctc caggaaggcg ggcaccccgg cgcgctcggc cgcctccact ccggggagca 1020

cgacggcgct gcccagaccc ttgccctggt ggtcgggcga cacgccgacg gtggccagga 1080

accacgcggg ctccttgggc cggtgcggcg ccaggaggcc ttccatctgt tgctgcgcgg 1140

ccagccggga accgctcaac tcggccatgc gcgggccgat ctcggcgaac accgcccccg 1200

cttcgacgct ctccggcgtg gtccagaccg ccaccgcggc gccgtcgtcc gcgacccaca 1260

ccttgccgat gtcgagcccg acgcgcgtga ggaagagttc ttgcagctcg gtgacccgct 1320

cgatgtggcg gtccggatcg acggtgtggc gcgtggcggg gtagtcggcg aacgcggcgg 1380

cgagggtgcg tacggccctg gggacgtcgt cgcgggtggc gaggcgcacc gtgggcttgt 1440

actcggtcat ggtggcggct ctagacagct tgggtgtgac gtgcgctccg gaggcttgca 1500

gaatgcggaa caccgcgcgg gcaggaacag ggcccacact accgccccac accccgcctc 1560

ccgcaccgcc ccttcccggc cgctgctctc agaaagcgaa ggagcaaagc tgctattggc 1620

cgctgcccca aaggcctacc cgcttccatt gctcagcggt gctgtccatc tgcacgagac 1680

tagtgagtcg tgctacttcc atttgtcacg tcctgcacga cgcgagctgc ggggcggggg 1740

ggaacttcct gactagggga ggagtagaag gtggcgcgaa ggggccacca aagaacggag 1800

ccggttggcg cctaccggtg gatgtggaat gtgtgcgagg ccagaggcca cttgtgtagc 1860

gccaagtgcc cagcggggct gctaaagcgc atgctccaga ctgccttggg aaaagcgcct 1920

cccctacccg gtagagaaac ttgatctgtc gccgcaattc aaacttcgtg aggctccggt 1980

gcccgtcagt gacctgctat a 2001

<210> 281
<211> 2022
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 281
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag ttatcattag tctttcttct 240

cgtagacttc aaacttatac ttgatgcctt tttcctcctg gacctcagag aggacgcctg 300

ggtattctgg gagaagttta tatttcccca aatcaatttc tgggaaaaac gtgtcacttt 360

caaattcctg catgatcctt gtcacaaaga gtctgaggtg gcctggttga ttcatggctt 420

cctggtaaac agaactgcct ccgactatcc aaaccatgtc tactttactt gccaattccg 480

gttgttcaat aagtcttaag gcatcatcca aacttttggc aagaaaatga gctcctcgtg 540

gtggttcttt gagttctcta ctgagaacta tattaattct gtcctttaaa ggtcgattct 600

tctcaggaat ggagaaccag gttttcctac ccataatcac cagattctgt ttaccttcca 660

ctgaagaggt tgtggtcatt ctttggaagt acttgaactc gttcctgagc ggaggccagg 720

gcaagtctcc gttcttgcca atccccatat tttgggacac ggcgacgatg cagttcaatg 780

gtcgaaccat ggggccggga ttttcctcca cgtccccgca tgttagcaga cttcccctgc 840

cctcagatgt accggcaccg ggcttgcggg tcatgcacca ggtgcgcggt ccttcgggca 900

cctcgacgtc ggcggtgacg gtgaagccga gccgctcgta gaaggggagg ttgcggggcg 960

cggatgtctc caggaaggcg ggcaccccgg cgcgctcggc cgcctccact ccggggagca 1020

cgacggcgct gcccagaccc ttgccctggt ggtcgggcga cacgccgacg gtggccagga 1080

accacgcggg ctccttgggc cggtgcggcg ccaggaggcc ttccatctgt tgctgcgcgg 1140

ccagccggga accgctcaac tcggccatgc gcgggccgat ctcggcgaac accgcccccg 1200

cttcgacgct ctccggcgtg gtccagaccg ccaccgcggc gccgtcgtcc gcgacccaca 1260

ccttgccgat gtcgagcccg acgcgcgtga ggaagagttc ttgcagctcg gtgacccgct 1320

cgatgtggcg gtccggatcg acggtgtggc gcgtggcggg gtagtcggcg aacgcggcgg 1380

cgagggtgcg tacggccctg gggacgtcgt cgcgggtggc gaggcgcacc gtgggcttgt 1440

actcggtcat ggtggcggct ctagacagct tgggtgtacc tgcgaagccc ctgagacgga 1500

cgtgcgctcc ggaggcttgc agaatgcgga acaccgcgcg ggcaggaaca gggcccacac 1560

taccgcccca caccccgcct cccgcaccgc cccttcccgg ccgctgctct cagaaagcga 1620

aggagcaaag ctgctattgg ccgctgcccc aaaggcctac ccgcttccat tgctcagcgg 1680

tgctgtccat ctgcacgaga ctagtgagtc gtgctacttc catttgtcac gtcctgcacg 1740

acgcgagctg cggggcgggg gggaacttcc tgactagggg aggagtagaa ggtggcgcga 1800

aggggccacc aaagaacgga gccggttggc gcctaccggt ggatgtggaa tgtgtgcgag 1860

gccagaggcc acttgtgtag cgccaagtgc ccagcggggc tgctaaagcg catgctccag 1920

actgccttgg gaaaagcgcc tcccctaccc ggtagagaaa cttgatctgt cgccgcaatt 1980

caaacttcgt gaggctccgg tgcccgtcag tgacctgcta ta 2022

<210> 282
<211> 1926
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 282
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag tcactatcag cccttctgcc 240

aaatctggta gctatagttg atgttcgagg cgaagtcttg ggtgaacacc ggcctaaagt 300

tgctcgggat ctcagggaag tacacatctc cttcgggttc gatgtcgatg gtggagatgt 360

gcagagtgtc cacttggtcg atcagtgact tgtagatttc gccccctccg gacacaatga 420

catggtcggt gatcttcttg aggttcgtga gagcgtcctt gatcgaaggg aagatcagca 480

catcctcatt gtcggaagtg aagctggatc tggtcacgac ggcgtatttc cggttcggca 540

gggcacccat ggattcgaaa gtcttgcgac cgacaagcaa ccactggttg taggtgatgg 600

ccttgaacag cagctgctct ccctttgcgg accagggaat atctgggccg ttcccaatca 660

ctccgttctt tgaaatcgcc accatggggc cgggattttc ctccacgtcc ccgcatgtta 720

gcagacttcc cctgccctca gatgtaccgg caccgggctt gcgggtcatg caccaggtgc 780

gcggtccttc gggcacctcg acgtcggcgg tgacggtgaa gccgagccgc tcgtagaagg 840

ggaggttgcg gggcgcggat gtctccagga aggcgggcac cccggcgcgc tcggccgcct 900

ccactccggg gagcacgacg gcgctgccca gacccttgcc ctggtggtcg ggcgacacgc 960

cgacggtggc caggaaccac gcgggctcct tgggccggtg cggcgccagg aggccttcca 1020

tctgttgctg cgcggccagc cgggaaccgc tcaactcggc catgcgcggg ccgatctcgg 1080

cgaacaccgc ccccgcttcg acgctctccg gcgtggtcca gaccgccacc gcggcgccgt 1140

cgtccgcgac ccacaccttg ccgatgtcga gcccgacgcg cgtgaggaag agttcttgca 1200

gctcggtgac ccgctcgatg tggcggtccg gatcgacggt gtggcgcgtg gcggggtagt 1260

cggcgaacgc ggcggcgagg gtgcgtacgg ccctggggac gtcgtcgcgg gtggcgaggc 1320

gcaccgtggg cttgtactcg gtcatggtgg cggacgaaag gcccggagat gaggaagagg 1380

agaacagcgc ggcagacgtg cgcttttgaa gcgtgcagaa tgccgggcct ccggaggacc 1440

ttcgggcgcc cgccccgccc ctgagcccgc ccctgagccc gcccccggac ccacccccttc 1500

ccagcctctg agcccagaaa gcgaaggagc aaagctgcta ttggccgctg ccccaaaggc 1560

ctacccgctt ccattgctca gcggtgctgt ccatctgcac gagactagtg agtcgtgcta 1620

cttccatttg tcacgtcctg cacgacgcga gctgcggggc ggggggggaac ttcctgacta 1680

ggggaggagt agaaggtggc gcgaaggggc caccaaagaa cggagccggt tggcgcctac 1740

cggtggatgt ggaatgtgtg cgaggccaga ggccacttgt gtagcgccaa gtgcccagcg 1800

gggctgctaa agcgcatgct ccagactgcc ttgggaaaag cgcctcccct acccggtaga 1860

gaaacttgat ctgtcgccgc aattcaaact tcgtgaggct ccggtgcccg tcagtgacct 1920

gctata 1926

<210> 283
<211> 2921
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 283
tagtcttcca ctgacgggca ccggagcctc acgaagtttg aattgcggcg acagatcaag 60

tttctctacc gggtagggga ggcgcttttc ccaaggcagt ctggagcatg cgctttagca 120

gccccgctgg gcacttggcg ctacacaagt ggcctctggc ctcgcacaca ttccacatcc 180

accggtaggc gccaaccggc tccgttcttt ggtggcccct tcgcgccacc ttctactcct 240

cccctagtca ggaagttccc ccccgccccg cagctcgcgt cgtgcaggac gtgacaaatg 300

gaagtagcac gactcactag tctcgtgcag atggacagca ccgctgagca atggaagcgg 360

gtaggccttt ggggcagcgg ccaatagcag ctttgctcct tcgctttctg ggctcagggg 420

cggggcgggc gcccgaaggt cctccggagg cccggcattc tgcacgcttc aaaagcgcac 480

gtctgccgcg ctgttctcct cttcctcatc tccgggcctt tcgtcacacc caagctgtct 540

agagccgcca ccatgaccga gtacaagccc acggtgcgcc tcgccacccg cgacgacgtc 600

cccagggccg tacgcaccct cgccgccgcg ttcgccgact accccgccac gcgccacacc 660

gtcgatccgg accgccacat cgagcgggtc accgagctgc aagaactctt cctcacgcgc 720

gtcgggctcg acatcggcaa ggtgtgggtc gcggacgacg gcgccgcggt ggcggtctgg 780

accacgccgg agagcgtcga agcgggggcg gtgttcgccg agatcggccc gcgcatggcc 840

gagttgagcg gttcccggct ggccgcgcag caacagatgg aaggcctcct ggcgccgcac 900

cggcccaagg agcccgcgtg gttcctggcc accgtcggcg tgtcgcccga ccaccagggc 960

aagggtctgg gcagcgccgt cgtgctcccc ggagtggagg cggccgagcg cgccggggtg 1020

cccgccttcc tggagacatc cgcgccccgc aacctcccct tctacgagcg gctcggcttc 1080

accgtcaccg ccgacgtcga ggtgcccgaa ggaccgcgca cctggtgcat gacccgcaag 1140

cccggtgcct gagaaacccg tatacaccgg acctttttctc ccctccctct ccacttacct 1200

ttttcccctc ttcggcatga aacaaggatt attcaagtgg aaacgcgatt taatatgcgg 1260

ctggccaccg cggaataacg gcaattgtgt atctgctgga agccaagcct gcctagccga 1320

tagcccttga ccgggtgtgt aggatagccc aggaaccagc aatacgcgac aggttatggt 1380

agagtagata cctagccagg ggcaatggga ctgcattgca tatccctaat gaaccattga 1440

gatttctctg gtcattaccc ggtgatggtt actagagggg ggcctctagt actagatcta 1500

tactgcctga tagggtcgcg gctggccgac catgacctgt atagtcagtt gatttgagca 1560

atatggccac ctcagcaagt tcccacttga acaaaaacat caagcaaatg tacttgtgcc 1620

tgccccaggg tgagaaagtc caagccatgt atatctgggt tgatggtact ggagaaggac 1680

tgcgctgcaa aacccgcacc ctggactgtg agcccaagtg tgtagaagag ttacctgagt 1740

ggaattttga tggctctagt acctttcagt ctgagggctc caacagtgac atgtatctca 1800

gccctgttgc catgtttcgg gaccccttcc gcagagatcc caacaagctg gtgttctgtg 1860

aagttttcaa gtacaaccgg aagcctgcag agacaaattt aaggcactcg tgtaaacgga 1920

taatggacat ggtgagcaac cagcacccct ggtttggaat ggaacaggag tatactctga 1980

tgggaacaga tgggcaccct tttggttggc cttccaatgg ctttcctggg ccccaaggtc 2040

cgtattactg tggtgtgggc gcagacaaag cctatggcag ggatatcgtg gaggctcact 2100

accgcgcctg cttgtatgct ggggtcaaga ttacaggaac aaatgctgag gtcatgcctg 2160

cccagtggga gttccaaata ggaccctgtg aaggaatccg catgggagat catctctggg 2220

tggcccgttt catcttgcat cgagtatgtg aggactttgg ggtaatagca acctttgacc 2280

ccaagcccat tcctgggaac tggaatggtg caggctgcca taccaacttt agcaccaagg 2340

ccatgcggga ggagaatggt ctgaagcaca tcgaggaggc catcgagaaa ctaagcaagc 2400

ggcaccggta ccacattcga gcctacgatc ccaaggggg cctggacaat gcccgtcgtc 2460

tgactgggtt ccacgaaacg tccaacatca acgactttc tgctggtgtc gccaatcgca 2520

gtgccagcat ccgcattccc cggactgtcg gccaggagaa gaaaggttac tttgaagatc 2580

gccgcccctc tgccaattgt gacccctttg cagtgacaga agccatcgtc cgcacatgcc 2640

ttctcaatga gactggcgac gagcccttcc aatacaaaaa ctggatccgc tcagacatga 2700

taagatacat tgatgagttt ggacaaacca caactagaat gcagtgaaaa aaatgcttta 2760

tttgtgaaat ttgtgatgct attgctttat ttgtaaccat tataagctgc aataaacaag 2820

ttaacaacaa caattgcatt cattttatgt ttcaggttca gggggaggtg tgggaggttt 2880

tttaaagcaa gtaaaacctc tacaaatgtg gtagaagaca g 2921

<210> 284
<211> 2577
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 284
gtaagcaggt tttctttatg ttttaaatgc actgacctcc cacattccct ttttagtaaa 60

atattcagaa ataatttaaa tacatcattg caatgaaaat aaatgttttt tattaggcag 120

aatccagatg ctcaaggccc ttcataatat cccccagttt agtagttgga cttagggaac 180

aaaggaacct ttaatagaaa ttggacagca agaaagcgag ttatcagttt ttgtattgga 240

agggctcgtc gccagtctca ttgagaaggc atgtgcggac gatggcttct gtcactgcaa 300

aggggtcaca attggcagag gggcggcgat cttcaaagta acctttcttc tcctggccga 360

cagtccgggg aatgcggatg ctggcactgc gattggcgac accagcagaa aagtcgttga 420

tgttggacgt ttcgtggaac ccagtcagac gacgggcatt gtccaggccc cccttgggat 480

cgtaggctcg aatgtggtac cggtgccgct tgcttagttt ctcgatggcc tcctcgatgt 540

gcttcagacc attctcctcc cgcatggcct tggtgctaaa gttggtatgg cagcctgcac 600

cattccagtt cccaggaatg ggcttggggt caaaggttgc tattacccca aagtcctcac 660

atactcgatg caagatgaaa cgggccaccc agagatgatc tcccatgcgg attccttcac 720

agggtcctat ttggaactcc cactgggcag gcatgacctc agcatttgtt cctgtaatct 780

tgaccccagc atacaagcag gcgcggtagt gagcctccac gatatccctg ccataggctt 840

tgtctgcgcc cacaccacag taatacggac cttggggccc aggaaagcca ttggaaggcc 900

aaccaaaagg gtgcccatct gttcccatca gagtatactc ctgttccatt ccaaaccagg 960

ggtgctggtt gctcaccatg tccattatcc gtttacacga gtgccttaaa tttgtctctg 1020

caggcttccg gttgtacttg aaaacttcac agaacaccag cttgttggga tctctgcgga 1080

aggggtcccg aaacatggca acagggctga gatacatgtc actgttggag ccctcagact 1140

gaaaggtact agagccatca aaattccact caggtaactc ttctacacac ttgggctcac 1200

agtccagggt gcgggttttg cagcgcagtc cttctccagt accatcaacc cagatataca 1260

tggcttggac tttctcaccc tggggcaggc acaagtacat ttgcttgatg tttttgttca 1320

agtgggaact tgctgaggtg gccatggggc cgggattttc ctccacgtcc ccgcatgtta 1380

gcagacttcc cctgccctca gatgtaccgg caccgggctt gcgggtcatg caccaggtgc 1440

gcggtccttc gggcacctcg acgtcggcgg tgacggtgaa gccgagccgc tcgtagaagg 1500

ggaggttgcg gggcgcggat gtctccagga aggcgggcac cccggcgcgc tcggccgcct 1560

ccactccggg gagcacgacg gcgctgccca gacccttgcc ctggtggtcg ggcgacacgc 1620

cgacggtggc caggaaccac gcgggctcct tgggccggtg cggcgccagg aggccttcca 1680

tctgttgctg cgcggccagc cgggaaccgc tcaactcggc catgcgcggg ccgatctcgg 1740

cgaacaccgc ccccgcttcg acgctctccg gcgtggtcca gaccgccacc gcggcgccgt 1800

cgtccgcgac ccacaccttg ccgatgtcga gcccgacgcg cgtgaggaag agttcttgca 1860

gctcggtgac ccgctcgatg tggcggtccg gatcgacggt gtggcgcgtg gcggggtagt 1920

cggcgaacgc ggcggcgagg gtgcgtacgg ccctggggac gtcgtcgcgg gtggcgaggc 1980

gcaccgtggg cttgtactcg gtcatggtgg cggctctaga cagcttgggt gtacctgcga 2040

agcccctgag acggacgtgc gctccggagg cttgcagaat gcggaacacc gcgcgggcag 2100

gaacagggcc cacactaccg ccccacaccc cgcctcccgc accgcccctt cccggccgct 2160

gctctcagaa agcgaaggag caaagctgct attggccgct gccccaaagg cctacccgct 2220

tccattgctc agcggtgctg tccatctgca cgagactagt gagtcgtgct acttccattt 2280

gtcacgtcct gcacgacgcg agctgcgggg cgggggggaa cttcctgact aggggaggag 2340

tagaaggtgg cgcgaagggg ccaccaaaga acggagccgg ttggcgccta ccggtggatg 2400

tggaatgtgt gcgaggccag aggccacttg tgtagcgcca agtgcccagc ggggctgcta 2460

aagcgcatgc tccagactgc cttgggaaaa gcgcctcccc tacccggtag agaaacttga 2520

tctgtcgccg caattcaaac ttcgtgaggc tccggtgccc gtcagtgacc tgctata 2577

<210> 285
<211> 2286
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 285
taaatgcact gacctcccac attccctttt tagtaaaata ttcagaaata atttaaatac 60

atcattgcaa tgaaaataaa tgtttttttat taggcagaat ccagatgctc aaggcccttc 120

ataatatccc ccagtttagt agttggactt agggaacaaa ggaaccttta atagaaattg 180

gacagcaaga aagcgagtta tcagtttttg tattggaagg gctcgtcgcc agtctcattg 240

agaaggcatg tgcggacgat ggcttctgtc actgcaaagg ggtcacaatt ggcagagggg 300

cggcgatctt caaagtaacc tttcttctcc tggccgacag tccggggaat gcggatgctg 360

gcactgcgat tggcgacacc agcagaaaag tcgttgatgt tggacgtttc gtggaaccca 420

gtcagacgac gggcattgtc caggcccccc ttgggatcgt aggctcgaat gtggtaccgg 480

tgccgcttgc ttagtttctc gatggcctcc tcgatgtgct tcagaccatt ctcctcccgc 540

atggccttgg tgctaaagtt ggtatggcag cctgcaccat tccagttccc aggaatgggc 600

ttggggtcaa aggttgctat taccccaaag tcctcacata ctcgatgcaa gatgaaacgg 660

gccacccaga gatgatctcc catgcggatt ccttcacagg gtcctatttg gaactcccac 720

tgggcaggca tgacctcagc atttgttcct gtaatcttga ccccagcata caagcaggcg 780

cggtagtgag cctccacgat atccctgcca taggctttgt ctgcgcccac accacagtaa 840

tacggacctt ggggcccagg aaagccattg gaaggccaac caaaagggtg cccatctgtt 900

cccatcagag tatactcctg ttccattcca aaccaggggt gctggttgct caccatgtcc 960

attatccgtt tacacgagtg ccttaaattt gtctctgcag gcttccggtt gtacttgaaa 1020

acttcacaga acaccagctt gttgggatct ctgcggaagg ggtcccgaaa catggcaaca 1080

gggctgagat acatgtcact gttggagccc tcagactgaa aggtactaga gccatcaaaa 1140

ttccactcag gtaactcttc tacacacttg ggctcacagt ccagggtgcg ggttttgcag 1200

cgcagtcctt ctccagtacc atcaacccag atatacatgg cttggacttt ctcaccctgg 1260

ggcaggcaca agtacatttg cttgatgttt ttgttcaagt gggaacttgc tgaggtggcc 1320

atggggccgg gattttcctc cacgtccccg catgttagca gacttcccct gccctcagat 1380

gtaccggcac cgggcttgcg ggtcatgcac caggtgcgcg gtccttcggg cacctcgacg 1440

tcggcggtga cggtgaagcc gagccgctcg tagaagggga ggttgcgggg cgcggatgtc 1500

tccaggaagg cgggcacccc ggcgcgctcg gccgcctcca ctccggggag cacgacggcg 1560

ctgcccagac ccttgccctg gtggtcgggc gacacgccga cggtggccag gaaccacgcg 1620

ggctccttgg gccggtgcgg cgccaggagg ccttccatct gttgctgcgc ggccagccgg 1680

gaaccgctca actcggccat gcgcgggccg atctcggcga acaccgcccc cgcttcgacg 1740

ctctccggcg tggtccagac cgccaccgcg gcgccgtcgt ccgcgaccca caccttgccg 1800

atgtcgagcc cgacgcgcgt gaggaagagt tcttgcagct cggtgacccg ctcgatgtgg 1860

cggtccggat cgacggtgtg gcgcgtggcg gggtagtcgg cgaacgcggc ggcgagggtg 1920

cgtacggccc tggggacgtc gtcgcgggtg gcgaggcgca ccgtgggctt gtactcggtc 1980

atggtggcgg ctctagacag cttgggtgta cctgcgaagc ccctgagacg gacgtgcgct 2040

ccggaggctt gcagaatgcg gaacaccgcg cgggcaggaa cagggcccac actaccgccc 2100

cacaccccgc ctcccgcacc gccccttccc ggccgctgct ctcagaaagc gaaggagcaa 2160

agctgctatt ggccgctgcc ccaaaggcct acccgcttcc attgctcagc ggtgctgtcc 2220

atctgcacga gactagtgag tcgtgctact tccatttgtc acgtcctgca cgacgcgagc 2280

tgcggg 2286

<210> 286
<211> 1296
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 286
cagcaggtgg gccgcctact gcgcacgcgc gggtttgcgg gcagccgcct gggctgtggg 60

agcagcccgg gcagagctct cctgcctctc caccagccca ccccgccgcc tgaccgcccc 120

ctccccaccc cccacccccc acccccggaa aacgcgtcgt cccctgggct gggtggagac 180

ccccgtcccg cgaaacaccg ggccccgcgc agcgtccggg cctgacaccg ctccggcggc 240

tcgcctccta tgcgcccccg cgccaccgtc gcccgcccgc ccgggcccct gcagccgccc 300

aggtgccagc acggagcgcc tggcggcgga acgcagaccc caggcccggc gcacaccggg 360

gacgctgagc gttccaggcg ggagggaagg cgggcagaga tggagagagg aacgggagac 420

ctagaggggc ggaaggacgg gcggagggac gttaggaggg agggagggag gcagggaggc 480

agggaggaac ggagggaaag acagagcgac gcagggactg ggggcgggcg ggagggagcc 540

ggggaacggg gggaggaagg cagggaggaa aagcggtcct cggcctccgg gagtagcggg 600

acccccgccc tccgggaaaa cggtcagcgt ccggcgcggg ctgagggctg ggcccacagc 660

cgccgcgccg gccggcgggg caccacccat tcgccccggt tccgtggccc agggagtggg 720

cggtttcctc cgggacaaaa gaccgggact cgggttgccg tcgggtcttc acccgcgcgg 780

ttcacagacc gcacatcccc aggctgagcc ctgcaacgcg gcgcgaggcc gacagccccg 840

gccacggagg agccacacgc aggacgacgg aggcgtgatt ttggtttccg cgtggctttg 900

ccctccgcaa ggcggcctgt tgctcacgtc tctccggccc ccgaaaggct ggccatgccg 960

actgtttgct cccggagctc tgcgggcacc cggaaacatg cagggaaggg tgcaagcccg 1020

gcacggtgcc ttcgctctcc ttgccaggtt ccaaaccggc cacactgcag actccccacg 1080

ttgccgcacg cgggaatcca tcgtcaggcc atcacgccgg ggaggcatct cctctctggg 1140

gtctcgctct ggtcttctac gtggaaatga acgagagcca cacgcctgcg tgtgcgagac 1200

cgtcccggca acggcgacgc ccacaggcat tgcctccttc acggagagag ggcctggcac 1260

actcaagact cccacggagg ttcagttcca cactcc 1296

<210> 287
<211> 1296
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 287
caccaggtgg gccgcctact gcgcacgcgc gggtttgcgg gcagccgcct gggctgtggg 60

agcagcccgg gcagagctct cctgcctctc caccagccca ccccgccgcc tgaccgcccc 120

ctccccaccc cccacccccc acccccggaa aacgcgtcgt cccctgggct gggtggtgac 180

ccccgtcccg cgaaacaccg ggccccgcgc agcgtccggg cctgacaccg ctccggcggc 240

tcgcctccta tgcgcccccg cgccaccgtc gcccgcccgc ccgggcccct gcagccgccc 300

aggtgccagc acggagcgcc tggcggcgga acgcagaccc caggcccggc gcacaccggg 360

gacgctgagc gttccaggcg ggagggaagg cgggcagaga tggagagagg aacgggagtc 420

ctagaggggc ggaaggacgg gcggagggac gttaggaggg agggagggag gcagggaggc 480

agggaggaac ggagggaaag acagagcgac gcagggactg ggggcgggcg ggagggagcc 540

ggggaacggg gggaggaagg cagggaggaa aagcggtcct cggcctccgg gagtagcggg 600

acccccgccc tccgggaaaa cggtcagcgt ccggcgcggg ctgagggctg ggcccacagc 660

cgccgcgccg gccggcgggg caccacccat tcgccccggt tccgtggccc agggagtggg 720

cggtttcctc cgggacaaaa gaccgggact cgggttgccg tcgggtgttc acccgcgcgg 780

ttcacagacc gcacatcccc aggctgagcc ctgcaacgcg gcgcgaggcc gacagccccg 840

gccacggagg agccacacgc aggacgacgg aggcgtgatt ttggtttccg cgtggctttg 900

ccctccgcaa ggcggcctgt tgctcaagtc tctccggccc ccgaaaggct ggccatgccg 960

actgtttgct cccggagctc tgcgggcacc cggaaacatg cagggaaggg tgcaagcccg 1020

gcacggtgcc ttcgctctcc ttgccaggtt ccaaaccggc cacactgcag actccccacg 1080

ttgccgcacg cgggaatcca tcgtcaggcc atcacgccgg ggaggcatct cctctctggg 1140

gtgtcgctct ggacttctac gtggaaatga acgagagcca cacgcctgcg tgtgccagac 1200

cgtcccggca acggcgacgc ccacaggcat tgcctccttc acggagagag ggcctggcac 1260

actcaagact cccacggagg ttcagttcca cactcc 1296

<210> 288
<211> 433
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 288
ggcgggaggg aaggcgggca gagatggaga gaggaacggg agacctagag gggcggaagg 60

acgggcggag ggacgttagg agggagggag ggaggcaggg aggcagggag gaacggaggg 120

aaagacagag cgacgcaggg actgggggcg ggcgggaggg agccggggaa cgggggggagg 180

aaggcaggga ggaaaagcgg tcctcggcct ccgggagtag cgggaccccc gccctccggg 240

aaaacggtca gcgtccggcg cgggctgagg gctgggccca cagccgccgc gccggccggc 300

ggggcaccac ccattcgccc cggttccgtg gcccagggag tgggcggttt cctccgggac 360

aaaagaccgg gactcgggtt gccgtcgggt cttcacccgc gcggttcaca gaccgcacat 420

ccccaggctg agc 433

<210> 289
<211> 433
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 289
ggcgggaggg aaggcgggca gagatggaga gaggaacggg agtcctagag gggcggaagg 60

acgggcggag ggacgttagg agggagggag ggaggcaggg aggcagggag gaacggaggg 120

aaagacagag cgacgcaggg actgggggcg ggcgggaggg agccggggaa cgggggggagg 180

aaggcaggga ggaaaagcgg tcctcggcct ccgggagtag cgggaccccc gccctccggg 240

aaaacggtca gcgtccggcg cgggctgagg gctgggccca cagccgccgc gccggccggc 300

ggggcaccac ccattcgccc cggttccgtg gcccagggag tgggcggttt cctccgggac 360

aaaagaccgg gactcgggtt gccgtcgggt gttcacccgc gcggttcaca gaccgcacat 420

ccccaggctg agc 433

<210> 290
<211> 65
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 290
agaggggcgg aagggacgtt aggagggagg cagggaggca gggaggcagg gaggaacgga 60

gggag 65

<210> 291
<211> 1213
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 291
gcgagctcac ggggacagcc ccccccccaaa gcccccaggg atgtaattac gtccctcccc 60

cgctaggggg cagcagcgag ccgcccgggg ctccgctccg gtccggcgct ccccccgcat 120

ccccgagccg gcagcgtgcg gggacagccc gggcacgggg aaggtggcac gggatcgctt 180

tcctctgaac gcttctcgct gctctttgag cctgcagaca cctgggggga tacggggaaa 240

aagctttagg ctgaaagaga gatttagaat gacagaatca tagaacggcc tgggttgcaa 300

aggagcacag tgctcatcca gatccaaccc cctgctatgt gcagggtcat caaccagcag 360

cccaggctgc ccagagccac atccagcctg gccttgaatg cctgcaggga tggggcatcc 420

acagcctcct tgggcaacct gttcagtgcg tcaccaccct ctgggggaaa aactgcctcc 480

tcatatccaa cccaaacctc ccctgtctca gtgtaaagcc attccccctt gtcctatcaa 540

gggggagttt gctgtgacat tgttggtctg gggtgacaca tgtttgccaa ttcagtgcat 600

cacggagagg cagatcttgg ggataaggaa gtgcaggaca gcatggacgt gggacatgct 660

ggtgttgagg gctctgggac actctccaag tcacagcgtt cagaacagcc ttaaggataa 720

gaagatagga tagaaggaca aagagcaagt taaaacccag catggagagg agcacaaaaa 780

ggccacagac actgctggtc cctgtgtctg agcctgcatg tttgatggtg tctggatgca 840

agcagaaggg gtggaagtgc ttgcctggag agatacagct gggtcagtag gactgggaca 900

ggcagctgga gaattgccat gtagatgttc atacaatcgt caaatcatga aggctggaaa 960

agccctccaa gatccccaag accaacccca acccacccac cgtgcccact ggccatgtcc 1020

ctcagtgcca catccccaca gttcttcatc acctccaggg acggtgaccc ccccacctcc 1080

gtgggcagct gtgccactgc agcaccgctc tttggagaag gtaaatcttg ctaaatccag 1140

cccgaccctc ccctggcaca acgtaaggcc attatctctc atccaactcc aggacggagt 1200

cagtgagaat att 1213

<210> 292
<211> 246
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 292
gcgagctcac ggggacagcc ccccccccaaa gcccccaggg atgtaattac gtccctcccc 60

cgctaggggg cagcagcgag ccgcccgggg ctccgctccg gtccggcgct ccccccgcat 120

ccccgagccg gcagcgtgcg gggacagccc gggcacgggg aaggtggcac gggatcgctt 180

tcctctgaac gcttctcgct gctctttgag cctgcagaca cctgggggga tacggggaaa 240

aagctt 246

<210> 293
<211> 1536
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 293
ctgttctcat cacatcatat caaggttata taccatcaat attgccacag atgttactta 60

gccttttaat atttctctaa tttagtgtat atgcaatgat agttctctga tttctgagat 120

tgagtttctc atgtgtaatg attatttaga gtttctcttt catctgttca aatttttgtc 180

tagttttatt ttttactgat ttgtaagact tctttttata atctgcatat tacaattctc 240

tttactgggg tgttgcaaat attttctgtc attctatggc ctgacttttc ttaatggttt 300

tttaatttta aaaataagtc ttaatattca tgcaatctaa ttaacaatct tttctttgtg 360

gttaggactt tgagtcataa gaaatttttc tctacactga agtcatgatg gcatgcttct 420

atattatttt ctaaaagatt taaagttttg ccttctccat ttagacttat aattcactgg 480

aatttttttg tgtgtatggt atgacatatg ggttcccttt tatttttttac atataaatat 540

atttccctgt ttttctaaaa aagaaaaaga tcatcatttt cccattgtaa aatgccatat 600

ttttttcata ggtcacttac atatatcaat gggtctgttt ctgagctcta ctctatttta 660

tcagcctcac tgtctatccc cacacatctc atgctttgct ctaaatcttg atatttagtg 720

gaacattctt tcccattttg ttctacaaga atatttttgt tattgtcttt gggctttcta 780

tatacatttt gaaatgaggt tgacaagtta ataacaggcc tattgattgg aaagtttgtc 840

aacgaattgt gggtcttttg gggtttgctg ccccttttac gcaatgtgga tatcctgctt 900

taatgccttt atatgcatgt atacaagcaa aacaggcttt tactttctcg ccaacttaca 960

aggcctttct cagtaaacag tatatgaccc tttaccccgt tgctcggcaa cggcctggtc 1020

tgtgccaagt gtttgctgac gcaaccccca ctggttgggg cttggccata ggccatcagc 1080

gcatgcgtgg aacctttgtg tctcctctgc cgatccatac tgcggaactc ctagccgctt 1140

gttttgctcg cagcaggtct ggagcaaacc tcatcgggac cgacaattct gtcgtactct 1200

cccgcaagta tacatcgttt ccatggctgc taggctgtgc tgccaactgg atcctgcgcg 1260

ggacgtcctt tgtttacgtc ccgtcggcgc tgaatcccgc ggacgacccc tcccggggcc 1320

gcttggggct ctaccgcccg cttctccgtc tgccgtaccg tccgaccacg gggcgcacct 1380

ctctttacgc ggactccccg tctgtgcctt ctcatctgcc ggaccgtgtg cacttcgctt 1440

cacctctgca cgtcgcatgg aggccaccgt gaacgcccac cggaacctgc ccaaggtctt 1500

gcataagagg actcttggac tttcagcaat gtcatc 1536

<210> 294
<211> 726
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 294
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cagctggact ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagta tacatcgttt ccatggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatc 726

<210> 295
<211> 726
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 295
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cagcaggtct ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagta tacatcgttt ccatggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacctgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatc 726

<210> 296
<211> 810
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 296
ctgttctcat cacatcatat caaggttata taccatcaat attgccacag atgttactta 60

gccttttaat atttctctaa tttagtgtat atgcaatgat agttctctga tttctgagat 120

tgagtttctc atgtgtaatg attatttaga gtttctcttt catctgttca aatttttgtc 180

tagttttatt ttttactgat ttgtaagact tcttttttata atctgcatat tacaattctc 240

tttactgggg tgttgcaaat attttctgtc attctatggc ctgacttttc ttaatggttt 300

tttaatttta aaaataagtc ttaatattca tgcaatctaa ttaacaatct tttctttgtg 360

gttaggactt tgagtcataa gaaatttttc tctacactga agtcatgatg gcatgcttct 420

atattatttt ctaaaagatt taaagttttg ccttctccat ttagacttat aattcactgg 480

aatttttttg tgtgtatggt atgacatatg ggttcccttt tatttttttac atataaatat 540

atttccctgt ttttctaaaa aagaaaaaga tcatcatttt cccattgtaa aatgccatat 600

ttttttcata ggtcacttac atatatcaat gggtctgttt ctgagctcta ctctatttta 660

tcagcctcac tgtctatccc cacacatctc atgctttgct ctaaatcttg atatttagtg 720

gaacattctt tcccattttg ttctacaaga atatttttgt tattgtcttt gggctttcta 780

tatacatttt gaaatgaggt tgacaagtta 810

<210> 297
<211> 155
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 297
ggcatgcttc tatattattt tctaaaagat ttaaagtttt gccttctcca tttagactta 60

taattcactg gaatttttt gtgtgtatgg tatgacatat gggttccctt ttatttttta 120

catataaata tatttccctg tttttctaaa aaaga 155

<210> 298
<211> 300
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 298
ggttcccttt tatttttac atataaatat atttccctgt ttttctaaaa aagaaaaaga 60

tcatcatttt cccattgtaa aatgccatat ttttttcata ggtcacttac atatatcaat 120

gggtctgttt ctgagctcta ctctatttta tcagcctcac tgtctatccc cacacatctc 180

atgctttgct ctaaatcttg atatttagtg gaacattctt tcccattttg ttctacaaga 240

atatttttgt tattgtcttt gggctttcta tatacatttt gaaatgaggt tgacaagtta 300

<210> 299
<211> 1454
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 299
aagctttaga ctctgggtag aatgttctgt ttcctgtaat ataaaatcat aaagtgatga 60

tattatcaag tgaaaaggaa atgtggtacc ttaatctttc cacatcaagc caatatcatg 120

ctgaaggcca gagaatcttt tttgctaaaa aacacaatac agatataatt aatagttatc 180

atttatgttt gatattaatc atatgaatat aattaatatg ttttattgta tcgattattg 240

ttgatattaa tgtaattact actaatacat aacaaatata actaatggtt atggctcagt 300

aactaaggta agatataagc tacactggta aagaaagatc aatattgctt cagagtacac 360

tgaagtaaat gaataactta accggtctag gttgtcactt atatttatac aacattttaa 420

gaactaagaa cctctcttct atgcttagta gatgaacaaa atcatgtaat agatgaatga 480

ggccaggaag tacaaaggtt tacaaaattg ccaagccact ctggggtgat tttatgagta 540

atgcggcatt tggtagcttg ccttaaagaa tattattgga cattatcaag tgtgtgtgtg 600

tgtgtgtgtg tgtgtgtgtg tgtgtgtaac tgaactctct tgtagtttca tttttgtttg 660

aaaaagacat gtatctcatg tagcccaggc tggaatcaaa ctctatcctt ctgtctccac 720

ctctcaggtt ctggggttcc tggcatgcag cacccaagcc cagctacctc tgtgaaaact 780

ataacttagt aatcagatcc tggaccattt aaagaatata tatatatgta tgtgtgtgtg 840

tgtgtatata tataatatat acatatgtat gtatatatac atatatatgt atgtgtatat 900

atgtatgtat agagaggctg actatatata tatatatata tatgaggctg aatatatata 960

tatatatgaa tacacataca catagtgcca tggcacattc ctttaatctg agctctcagg 1020

caaaggcaga ccaatctctg agttgttcaa ggccagtgtg atccatagtc tcagaaatta 1080

tatactgaga cactcctgag gatgttatca catttctagt ttccttatct tactttagga 1140

catgattcca aaaaaaaggg gggggggaca cacagtcaat ggtagagtta caagactatg 1200

ccgatgtggt gactcaagaa gagagggctg agggagctga aacaggcatg ttcccatgaa 1260

ttccgggcaa gcctaggcta tagagtgaga ccaccatgat ttaaaaaaaa aaaaaaagtg 1320

gcacgcgaga aagtcaacaa tgctttgcat aagtgtttta cctcaaaatc gctgaatagt 1380

tgactagaac aaattaaaac cttgtccaaa gtcaaggcca gtgggatcag ggactccctc 1440

cagtcctgaa gctt 1454

<210> 300
<211> 1260

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 300
tagactctgg gtagaatgtt ctgtttcctg taatataaaa tcataaagtg atgatattat 60

caagtgaaaa ggaaatgtgg taccttaatc tttccacatc aagccaatat catgctgaag 120

gccagagaat ctttttgct aaaaaacaca atacagatat aattaatagt tatcatttat 180

gtttgatatt aatcatatga atataattaa tatgttttat tgtatcgatt attgttgata 240

ttaatgtaat tactactaat acataacaaa tataactaat ggttatggct cagtaactaa 300

ggtaagatat aagctacact ggtaaagaaa gatcaatatt gcttcagagt acactgaagt 360

aaatgaataa cttaaccggt ctaggttgtc acttatattt atacaacatt ttaagaacta 420

agaacctctc ttctatgctt agtagatgaa caaaatcatg taatagatga atgaggccag 480

gaagtacaaa ggtttacaaa attgccaagc cactctgggg tgattttatg agtaatgcgg 540

catttggtag cttgccttaa agaatattat tggacattat caagtgtgtg tgtgtgtgtg 600

tgtgtgtgtg tgtgtgtgtg taactgaact ctcttgtagt ttcatttttg tttgaaaaag 660

acatgtatct catgtagccc aggctggaat caaactctat ccttctgtct ccacctctca 720

ggttctgggg ttcctggcat gcagcaccca agcccagcta cctctgtgaa aactataact 780

tagtaatcag atcctggacc atttaaagaa tatatatata tgtatgtgtg tgtgtgtgta 840

tatatataat atatacatat gtatgtatat atacatatat atgtatgtgt atatatgtat 900

gtatagagag gctgactata tatatatata tatatatgag gctgaatata tatatatata 960

tgaatacaca tacacatagt gccatggcac attcctttaa tctgagctct caggcaaagg 1020

cagaccaatc tctgagttgt tcaaggccag tgtgatccat agtctcagaa attatatact 1080

gagacactcc tgaggatgtt atcacatttc tagtttcctt atcttacttt aggacatgat 1140

tccaaaaaaa agggggggggg gacacacagt caatggtaga gttacaagac tatgccgatg 1200

tggtgactca agaagagagg gctgagggag ctgaaacagg catgttccca tgaattccgg 1260

<210> 301
<211> 404
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 301
tagactctgg gtagaatgtt ctgtttcctg taatataaaa tcataaagtg atgatattat 60

caagtgaaaa ggaaatgtgg taccttaatc tttccacatc aagccaatat catgctgaag 120

gccagagaat ctttttgct aaaaaacaca atacagatat aattaatagt tatcatttat 180

gtttgatatt aatcatatga atataattaa tatgttttat tgtatcgatt attgttgata 240

ttaatgtaat tactactaat acataacaaa tataactaat ggttatggct cagtaactaa 300

ggtaagatat aagctacact ggtaaagaaa gatcaatatt gcttcagagt acactgaagt 360

aaatgaataa cttaaccggt ctaggttgtc acttatattt atac 404

<210> 302
<211> 691
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 302
tagactctgg gtagaatgtt ctgtttcctg taatataaaa tcataaagtg atgatattat 60

caagtgaaaa ggaaatgtgg taccttaatc tttccacatc aagccaatat catgctgaag 120

gccagagaat ctttttgct aaaaaacaca atacagatat aattaatagt tatcatttat 180

gtttgatatt aatcatatga atataattaa tatgttttat tgtatcgatt attgttgata 240

ttaatgtaat tactactaat acataacaaa tataactaat ggttatggct cagtaactaa 300

ggtaagatat aagctacact ggtaaagaaa gatcaatatt gcttcagagt acactgaagt 360

aaatgaataa cttaaccggt ctaggttgtc acttatattt atacaacatt ttaagaacta 420

agaacctctc ttctatgctt agtagatgaa caaaatcatg taatagatga atgaggccag 480

gaagtacaaa ggtttacaaa attgccaagc cactctgggg tgattttatg agtaatgcgg 540

catttggtag cttgccttaa agaatattat tggacattat caagtgtgtg tgtgtgtgtg 600

tgtgtgtgtg tgtgtgtgtg taactgaact ctcttgtagt ttcatttttg tttgaaaaag 660

acatgtatct catgtagccc aggctggaat c 691

<210> 303
<211> 1454
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 303
aagctttaga ctctgggtag aatgttctgt ttcctgtaat ataaaatcat aaagtgatga 60

tattatcaag tgaaaaggaa atgtggtacc ttaatctttc cacatcaagc caatatcatg 120

ctgaaggcca gagaatcttt tttgctaaaa aacacaatac agatataatt aatagttatc 180

atttatgttt gatattaatc atatgaatat aattaatatg ttttattgta tcgattattg 240

ttgatattaa tgtaattact actaatacat aacaaatata actaatggtt atggctcagt 300

aactaaggta agatataagc tacactggta aagaaagatc aatattgctt cagagtacac 360

tgaagtaaat gaataactta accggtctag gttgtcactt atatttatac aacattttaa 420

gaactaagaa cctctcttct atgcttagta gatgaacaaa atcatgtaat agatgaatga 480

ggccaggaag tacaaaggtt tacaaaattg ccaagccact ctggggtgat tttatgagta 540

atgcggcatt tggtagcttg ccttaaagaa tattattgga cattatcaag tgtgtgtgtg 600

tgtgtgtgtg tgtgtgtgtg tgtgtgtaac tgaactctct tgtagtttca tttttgtttg 660

aaaaagacat gtatctcatg tagcccaggc tggaatcaaa ctctatcctt ctgtctccac 720

ctctcaggtt ctggggttcc tggcatgcag cacccaagcc cagctacctc tgtgaaaact 780

ataacttagt aatcagatcc tggaccattt aaagaatata tatatatgta tgtgtgtgtg 840

tgtgtatata tataatatat acatatgtat gtatatatac atatatatgt atgtgtatat 900

atgtatgtat agagaggctg actatatata tatatatata tatgaggctg aatatatata 960

tatatatgaa tacacataca catagtgcca tggcacattc ctttaatctg agctctcagg 1020

caaaggcaga ccaatctctg agttgttcaa ggccagtgtg atccatagtc tcagaaatta 1080

tatactgaga cactcctgag gatgttatca catttctagt ttccttatct tactttagga 1140

catgattcca aaaaaaaggg gggggggaca cacagtcaat ggtagagtta caagactatg 1200

ccgatgtggt gactcaagaa gagagggctg agggagctga aacaggcatg ttcccatgaa 1260

ttccgggcaa gcctaggcta tagagtcaga ccaccatgat ttaaaaaaaa aaaaaaagtg 1320

gcacgcgaga aagtcaacaa tgctttgcat aagtgtttta cctcaaaatc gctgaatagt 1380

tgactagaac aaattaaaac cttgtccaaa gtcaaggcca gtgggatcag ggactccctc 1440

cagtcctgaa gctt 1454

<210> 304
<211> 293
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 304
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta cca 293

<210> 305
<211> 364
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 305
actagttatt aatagtaatc aattacgggg tcattagttc atagcccata tatggagttc 60

cgcgttacat aacttacggt aaatggcccg cctggctgac cgcccaacga cccccgccca 120

ttgacgtcaa taatgacgta tgttcccata gtaacgccaa tagggacttt ccattgacgt 180

caatgggtgg agtatttacg gtaaactgcc cacttggcag tacatcaagt gtatcatatg 240

ccaagtacgc cccctattga cgtcaatgac ggtaaatggc ccgcctggca ttatgcccag 300

tacatgacct tatgggactt tcctacttgg cagtacatct acgtattagt catcgctatt 360

acca 364

<210> 306
<211> 375
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 306
attgattatt gactagttat taatagtaat caattacggg gtcattagtt catagcccat 60

atatggagtt ccgcgttaca taacttacgg taaatggccc gcctggctga ccgcccaacg 120

acccccgccc attgacgtca ataatgacgt atgttcccat agtaacgcca atagggactt 180

tccattgacg tcaatgggtg gagtatttac ggtaaactgc ccacttggca gtacatcaag 240

tgtatcatat gccaagtacg ccccctattg acgtcaatga cggtaaatgg cccgcctggc 300

attatgccca gtacatgacc ttatgggact ttcctacttg gcagtacatc tacgtattag 360

tcatcgctat tacca 375

<210> 307
<211> 375
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 307
attgattatt gactagttat taatagtaat caattacggg gtcattagtt catagcccat 60

atatggagtt ccgcgttaca taacttacgg taaatggccc gcctggctga ccgcccaacg 120

acccccgccc attgacgtca ataatgacgt atgttcccat agtaacgcca atagggactt 180

tccattgacg tcaatgggtg gagtatttac ggtaaactgc ccacttggca gtacatcaag 240

tgtatcatat gccaagtccg ccccctattg acgtcaatga cggtaaatgg cccgcctggc 300

attatgccca gtacatgacc ttacgggact ttcctacttg gcagtacatc tacgtattag 360

tcatcgctat tacca 375

<210> 308
<211> 374
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 308
attgattatt gagtagttat taatagtaat caattacggg gtcattagtt catagcccat 60

atatggagtt ccgcgttaca taacttacgg taaatggccc gcctggctga ccgcccaacg 120

acccccgccc attgacgtca ataatgacgt atgttcccat agtaacgcca atagggactt 180

tccattgacg tcaatgggtg gagtatttac ggtaaactgc ccacttggca gtacatcaag 240

tgtatcatat gccaagtacg ccccctattg acgtcaatga cggtaaatgg cccgcctggc 300

attatgccca gtacatgacc ttatgggact ttcctacttg gcagtacatc tacggttagt 360

catcgctatt acca 374

<210> 309
<211> 305
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 309
ccgcgttaca taacttacgg taaatggccc gcctggctga ccgcccaacg acccccgccc 60

attgacgtca ataatgacgt atgttcccat agtaacgcca atagggactt tccattgacg 120

tcaatgggtg gagtatttac ggtaaactgc ccacttggca gtacatcaag tgtatcatat 180

gccaagtacg ccccctattg acgtcaatga cggtaaatgg cccgcctggc attatgccca 240

gtacatgacc ttatgggact ttcctacttg gcagtacatc tacgtattag tcatcgctat 300

tacca 305

<210> 310
<211> 275
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 310
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

agtaacgcca atagggactt tccattgacg tcaatgggtg gagtatttac ggtaaactgc 120

ccacttggca gtacatcaag tgtatcatat gccaagtacg ccccctattg acgtcaatga 180

cggtaaatgg cccgcctggc attgtgccca gtacatgacc ttatgggact ttcctacttg 240

gcagtacatc tacgtattag tcatcgctat tacca 275

<210> 311
<211> 293
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 311
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtacgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

atgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta cca 293

<210> 312
<211> 292
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 312
actacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 60

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 120

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 180

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 240

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac ca 292

<210> 313
<211> 293
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 313
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

ctatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtacgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

atgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta cca 293

<210> 314
<211> 412
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 314
gtcagtgtac ttggctccaa tgggtttttc ccattgactc atcccctatt gaccttatgt 60

actgggcaaa acccaatgga aagtccctat tgacgcagtg tacttggctc caatgggact 120

ttcctgttga ttcacccccc attgacctta tgtactgggc agaatacaat ggaaagtccc 180

tattgactca cccacattga ccttatatgc ttgccaacaa tggaaaaacc cattggaaag 240

tccctattga gtcagtgtac ttggcagcaa tgggtttttc ccattggctc acctcccatt 300

gacccaatgt acttgggcaa aacccagtgg aaagtcccat ttgactcagt gtgcttgcca 360

gtaatgggaa aaacccattg gcttacctcc cattgaccca atgtacttgg gt 412

<210> 315
<211> 294
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 315
tgagtcaata gggactttcc aatgggtttt gcccagtaca taaggtcaat gggaggtaag 60

ccaatgggtt tttcccatta ctggcacgta tactgagtca ttagggactt tccaatgggt 120

tttgcccagt acataaggtc aataggggtg aatcaacagg aaagttccat tggagccaag 180

tacactgagt caatagggac tttccattgg gttttgccca gtacaaaagg tcaatagggg 240

gtgagtcaat gggtttttcc cattattggc acgtacataa ggtcaatagg ggtg 294

<210> 316
<211> 423
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 316
gagtcaatgg gaaaaaccca ttggagccaa gtacactgac tcaataggga ctttccattg 60

ggttttgccc agtacataag gtcaataggg ggtgagtcaa caggaaagtc ccattggagc 120

caagtacatt gagtcaatag ggactttcca atgggttttg cccagtacat aaggtcaatg 180

ggaggtaagc caatgggttt ttcccattac tgacatgtat actgagtcat tagggacttt 240

ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga aagtcccatt 300

ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag tacaaaaggt 360

caataggggg tgagtcaatg ggtttttccc attattggca catacataag gtcaataggg 420

gtg 423

<210> 317
<211> 412
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 317
gtcagtgtac ttggctccaa tgggtttttc ccattgactc atcccctatt gaccttatgt 60

actgggcaaa acccaatgga aagtccctat tgacgcagtg tacttggctc caatgggact 120

ttcctgttga ttcacccccc attgacctta tgtactgggc agaatacaat ggaaagtccc 180

tattgactca cccacattga ccttatatgc ttgccaacaa tggaaaaacc cattggaaag 240

tccctattga gtcagtgtac ttggcagcaa tgggtttttc ccattggctc acctcccatt 300

gacccaatgt acttgggcaa aacccagtgg aaagtcccat ttgactcagt gtgcttgcca 360

gtaatgggaa aaacccattg gcttacctcc cattgaccca atgtacttgg gt 412

<210> 318
<211> 294
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 318
tgagtcaata gggactttcc aatgggtttt gcccagtaca taaggtcaat gggaggtaag 60

ccaatgggtt tttcccatta ctggcacgta tactgagtca ttagggactt tccaatgggt 120

tttgcccagt acataaggtc aataggggtg aatcaacagg aaagttccat tggagccaag 180

tacactgagt caatagggac tttccattgg gttttgccca gtacaaaagg tcaatagggg 240

gtgagtcaat gggtttttcc cattattggc acgtacataa ggtcaatagg ggtg 294

<210> 319
<211> 423
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 319
gagtcaatgg gaaaaaccca ttggagccaa gtacactgac tcaataggga ctttccattg 60

ggttttgccc agtacataag gtcaataggg ggtgagtcaa caggaaagtc ccattggagc 120

caagtacatt gagtcaatag ggactttcca atgggttttg cccagtacat aaggtcaatg 180

ggaggtaagc caatgggttt ttcccattac tgacatgtat actgagtcat tagggacttt 240

ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga aagtcccatt 300

ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag tacaaaaggt 360

caatagggggg tgagtcaatg ggtttttccc attattggca catacataag gtcaataggg 420

gtg 423

<210> 320
<211> 206
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 320
tatactgagt cattagggac tttccaatgg gttttgccca gtacataagg tcaatagggg 60

tgaatcaaca ggaaagtccc attggagcca agtacactga gtcaataggg actttccatt 120

gggttttgcc cagtacaaaa ggtcaatagg gggtgagtca atgggttttt cccattattg 180

gcacgtacat aaggtcaata ggggtg 206

<210> 321
<211> 106
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 321
ccattggagc caagtacact gagtcaatag ggactttcca ttgggttttg cccagtacaa 60

aaggtcaata gggggtgagt caatgggttt ttcccattat tggcac 106

<210> 322
<211> 292
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 322
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgcccct attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt at 292

<210> 323
<211> 102
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 323
ccagctgttg gggtgagtac tccctctcaa aagcgggcat tacttctgcg ctaagattgt 60

cagtttccaa aaacgaggag gatttgatat tcacctggcc cg 102

<210> 324
<211> 144
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 324
ggtgtggaaa gtccccaggc tccccagcag gcagaagtat gcaaagcatg catctcaatt 60

agtcagcaac caggtgtgga aagtccccag gctccccagc aggcagaagt atgcaaagca 120

tgcatctcaa ttagtcagca acca 144

<210> 325
<211> 178
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 325
gcacatcgcc cacagtcccc gagaagttgg ggggaggctc tggctgcagg taattgaacc 60

ggtgcctaga gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta ctggctccgc 120

ctttttcccg agggtggggg agaaccgtat ataagtgcag tagtcgccgt gaacgttc 178

<210> 326
<211> 369
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 326
acccgccccg accggagctg agagtaattc atacaaaagg actcgcccct gccttgggga 60

atcccaggga ccgtcgttaa actcccacta acgtagaacc cagagatcgc tgcgttcccg 120

ccccctcacc cgcccgctct cgtcatcact gaggtggaga atagcatgcg tgaggctccg 180

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg ggaggggtcg 240

gcaattgaac cggtgcctag agaaggtggc gcggggtaaa ctgggaaagt gatgtcgtgt 300

actggctcag ccttttttccc gagggtgggg gagaaccgta tataagtgca gtagtcgccg 360

tgaacgttc 369

<210> 327
<211> 369

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 327
acccgccccg accggagctg agagtaattc atacaaaagg actcgcccct gccttgggga 60

atcccaggga ccgtcgttaa actcccacta acgtagaacc cagagatcgc tgcgttcccg 120

ccccctcacc cgcccgctct cgtcatcact gaggtggaga atagcatgcg tgaggctccg 180

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg ggaggggtcg 240

gcaattgaac cggtgcctag agaaggtggc gcggggtaaa ctgggaaagt gatgtcgtgt 300

actggctccg ccttttttccc gagggtgggg gagaaccgta tataagtgca gtagtcgccg 360

tgaacgttc 369

<210> 328
<211> 372
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 328
acccgccccg accggagctg agagtaattc atacaaaagg actcgcccct gccttgggga 60

atcccaggga ccgtcgttaa actcccacta acgtagaacc cagagatcgc tgcgttcccg 120

ccccctcacc cgcccgctct cgtcatcact gaggtggaga atagcatgcg tgaggctccg 180

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg gggggagggg 240

tcggcaattg aaccggtgcc tagagaaggt ggcgcggggt aaactgggaa agtgatgtcg 300

tgtactggct ccgccttttt cccgagggtg ggggagaacc gtatataagt gcagtagtcg 360

ccgtgaacgt tc 372

<210> 329
<211> 372
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 329
acccgccccg accggagctg agagtaattc atacaaaagg actcgcccct gccttgggga 60

atcccaggga ccgtcgttaa actcccacta acgtagaacc cagagatcgc tgcgttcccg 120

ccccctcacc cgcccgctct cgtcatcact gaggtggaga atagcatgcg tgaggctccg 180

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg gggggagggg 240

tcggcaattg aacgggtgcc tagagaaggt ggcgcggggt aaactgggaa agtgatgtcg 300

tgtactggct ccgccttttt cccgagggtg ggggagaacc gtatataagt gcagtagtcg 360

ccgtgaacgt tc 372

<210> 330
<211> 372
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 330
acccgccccg accggagctg agagtaattc atacaaaagg actcgcccct gccttgggga 60

atcccaggga ccgtcgttaa actcccacta acgtagaacc cagagatcgc tgcgttcccg 120

ccccctcacc cgcccgctct cgtcatcact gaggtggaga atagcatgcg tgaggctccg 180

gtgcccgtca gtgggcagag cgcacatcgc ccacagtccc cgagaagttg gggggagggg 240

tcggcaattg atccggtgcc tagagaaggt ggcgcggggt aaactgggaa agtgatgtcg 300

tgtactggct ccgccttttt cccgagggtg ggggagaacc gtatataagt gcagtagtcg 360

ccgtgaacgt tc 372

<210> 331
<211> 570
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 331
ctgggctgag acccgcagag gaagacgctc tagggatttg tcccggacta gcgagatggc 60

aaggctgagg acgggaggct gattgagagg cgaaggtaca ccctaatctc aatacaacct 120

ttggagctaa gccagcaatg gtagagggaa gattctgcac gtcccttcca ggcggcctcc 180

ccgtcaccac ccccccccaac ccgccccgac cggagctgag agtaattcat acaaaaggac 240

tcgcccctgc cttggggaat cccagggacc gtcgttaaac tcccactaac gtagaaccca 300

gagatcgctg cgttcccgcc ccctcacccg cccgctctcg tcatcactga ggtggagaag 360

agcatgcgtg aggctccggt gcccgtcagt gggcagagcg cacatcgccc acagtccccg 420

agaagttggg gggaggggtc ggcaattgaa ccggtgccta gagaaggtgg cgcggggtaa 480

actgggaaag tgatgtcgtg tactggctcc gccttttttcc cgagggtggg ggagaaccgt 540

atataagtgc agtagtcgcc gtgaacgttc 570

<210> 332
<211> 168
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 332
gcacatcgcc cacagtcccc gagaagttgg gaggggtcgg caattgaacc ggtgcctaga 60

gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta ctggctccgc ctttttcccg 120

agggtggggg agaaccgtat ataagtgcag tagtcgccgt gaacgttc 168

<210> 333
<211> 171
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 333
gcacatcgcc cacagtcccc gagaagttgg ggggaggggt cggcaattga accggtgcct 60

agagaaggtg gcgcggggta aactgggaaa gtgatgtcgt gtactggctc cgccttttc 120

ccgagggtgg gggagaaccg tatataagtg cagtagtcgc cgtgaacgtt c 171

<210> 334
<211> 171
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 334
gcacatcgcc cacagtcccc gagaagttgg ggggaggggt cggcaattga acgggtgcct 60

agagaaggtg gcgcggggta aactgggaaa gtgatgtcgt gtactggctc cgccttttc 120

ccgagggtgg gggagaaccg tatataagtg cagtagtcgc cgtgaacgtt c 171

<210> 335
<211> 168
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 335
gcacatcgcc cacagtcccc gagaagttgg gaggggtcgg caattgaacc ggtgcctaga 60

gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta ctggctcagc ctttttcccg 120

agggtggggg agaaccgtat ataagtgcag tagtcgccgt gaacgttc 168

<210> 336
<211> 171
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 336
gcacatcgcc cacagtcccc gagaagttgg ggggaggggt cggcaattga tccggtgcct 60

agagaaggtg gcgcggggta aactgggaaa gtgatgtcgt gtactggctc cgccttttc 120

ccgagggtgg gggagaaccg tatataagtg cagtagtcgc cgtgaacgtt c 171

<210> 337
<211> 440
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 337
agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 60

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 120

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 180

caaggggaga gcccagggac cgtccctaaa ttctcacaga cccaaatccc tgtagccgcc 240

ccacgacagc gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 300

ctcatagacc ctggtcgtgg gggggaggac cggggagctg gcgcggggca aactgggaaa 360

gcggtgtcgt gtgctggctc cgccctcttc ccgagggtgg gggagaacgg tatataagtg 420

cggcagtcgc cttggacgtt 440

<210> 338
<211> 480
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 338
agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 60

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 120

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 180

cctggggaag tcccagggac cgtcgctaaa ttctcataac ccataatccc ggtacccgcc 240

ccaccacagt gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 300

ctcatagacc ctggtcgtgg ggggaggggc gcactgagcg gggggggggg gggtgatggg 360

ggggaggacc ggggagctgg cgcggggcaa actgggaaag cggtgtcgtg tgctggctcc 420

gccctcttcc cgagggtggg ggagaacggt atataagtgc ggcagtcgcc ttggacgttc 480

<210> 339
<211> 316
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 339
ggagccgaga gtaattcata caaaaggagg gatcgccttc gcaaggggag agcccaggga 60

ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag cgcgaggagc 120

atgcgcccag ggctgagcgc gggtagatca gagcacacaa gctcacagtc cccggcggtg 180

gggggagggg cgcgctgagc gggggccagg gagctggcgc ggggcaaact gggaaagtgg 240

tgtcgtgtgc tggctccgcc ctcttcccga gggtggggga gaacggtata taagtgcggt 300

agtcgccttg gacgtt 316

<210> 340
<211> 503
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 340
cctctcccgg ccagaggagc aaggtatgcg ggaggcgacc aggaggatag cggggctgac 60

gtcgggaggt ggcctccgtg ggaaggacac ccggatcttg acacagcctt ggcagcggag 120

tcaggaagag taggggtagg ttctggacgc cctcttggcc agctcatcgc cgccccaccc 180

tctgctggag cacagagtaa ttcatacaaa aggagggatc gccttcgcaa ggggagagcc 240

cagggaccgt ccctaaattc tcacagaccc aaatccctgt agccgcccca cgacagcgcg 300

aggagcatgc gcccagggct gagcgcgggt agatcagagc acacaagctc acagtccccg 360

gcggtggggg gaggggcgcg ctgagcgggg gccagggagc tggcgcgggg caaactggga 420

aagtggtgtc gtgtgctggc tccgccctct tcccgagggt gggggagaac ggtatataag 480

tgcggtagtc gccttggacg ttc 503

<210> 341
<211> 503
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 341
cctctcccgg ccagaggagc aaggtatgcg ggaggcgacc aggaggatag cggggctgac 60

gtcgggaggt ggcctccgtg ggaaggacac ccggatcttg acacagcctt ggcagcggag 120

tcaggaagag taggggtagg ttctggacgc cctcttggcc agctcttcgc cgccccaccc 180

tctgctggag cacagagtaa ttcatacaaa aggagggatc gccttcgcaa ggggagagcc 240

cagggaccgt ccctaaattc tcacagaccc aaatccctgt agccgcccca cgacagcgcg 300

aggagcatgc gcccagggct gagcgcgggt agatcagagc acacaagctc acagtccccg 360

gcggtggggg gaggggcgcg ctgagcgggg gccagggagc tggcgcgggg caaactggga 420

aagtggtgtc gtgtgctggc tccgccctct tcccgagggt gggggagaac ggtatataag 480

tgcggtagtc gccttggacg ttc 503

<210> 342
<211> 301
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 342
ggagccgaga gtaattcata caaaaggagg gatcgccttc gcaaggggag agcccaggga 60

ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag cgcgaggagc 120

atgcgctcag ggctgagcgc ggggagagca gagcacacaa gctcatagac cctggtcgtg 180

gggggggagga ccggggagct ggcgcggggc aaactgggaa agcggtgtcg tgtgctggct 240

ccgccctctt cccgagggtg ggggagaacg gtatataagt gcggcagtcg ccttggacgt 300

t 301

<210> 343
<211> 459
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 343
ggcggggctg acgtcgggag gtggcctcca cgggaaggga cacccggatc tcgacacagc 60

cttggcagtg gagtcaggaa gggtaggaca gattctggac gccctcttgg ccagtcctca 120

ccgccccacc cccgatggag ccgagagtaa ttcatacaaa aggagggatc gccttcgccc 180

ctgggaatcc cagggaccgt cgctaaattc tggccggcct cccagcccgg aaccgctgtg 240

cccgcccagc gcggcgggag gagcctgcgc ctagggcgga tcgcgggtcg gcgggagagc 300

acaagcccac agtccccggc ggtgggggag gggcgcgctg agcgggggcc cgggagccag 360

cgcggggcaa actgggaaag tggtgtcgtg tgctggctcc gccctcttcc cgagggtggg 420

ggagaacggt ataaaagtgc ggtagtcgcg ttggacgtt 459

<210> 344
<211> 600
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 344
ggggactctg aaggcaaaga cggaggagga gcctgccccg ggcgcgtatg ggaccagcag 60

aagaagctgt tcaaggggtt tgtccaggac ccgcgagagg tcaaggctga ggacgggagg 120

cgtactgcgg ggtgaaggga taccccaacc tggataccat ctttgcaaag aaagcaggaa 180

cggtggaggg aagattctaa gcgtccccgc ctggccgtct actctccgcc ccacccccag 240

ctgcagctga gagtaattca tacaaaagga ggactcgcct tggcctcggg gaatcccagg 300

gaccgtcggt aaactcccac taacctagaa ccgagggctc gctcgtcccc gcctcccacc 360

ccgcgctctc gtcatcatcg gggtcgagag gagcatgcgc aaggcgacgg gtgcttttca 420

gtgggctgag cgcacatcgc ccacggtccc cgaaacgttg ggggagggga cggcgattga 480

acgggtgccc ggtggaggtg gcgcggggta aactgggaaa gtcgtgtcgt gtgctgactc 540

cgccctcttc ccgagggtgg gggaggaccg tatataagtg ccgtagtcct cttgaacgtt 600

<210> 345
<211> 451
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 345
gccaggggtg aggccaagac ccgcggcagg gcgaaggcac accccagtgt ccactcaacc 60

tctgtgctaa gccacgaaga aaaggaagat tctggactgc ctttctggcg attcctagcc 120

gccccacccc cggctggaac caggagtaat tcatacaaaa ggaggactcg cctctgccct 180

cgggaatccc agggaccgtc gataaattct cttaataccc gccccgcggc ctccgagtcg 240

aggagagcat gggccgccga actggttgcg gatcagggcg ccgagcccac agcatcacgg 300

tccccgaggg cgggggaggg gacggcaagg gagcaaggcc aggaggaggc ggcgcggggc 360

aaactgggaa agtggtgtcg tgtgctggct ccgccctctt tccgagggtg ggggagaacg 420

gtatataagt gccgtagtcg ccctggacgt t 451

<210> 346
<211> 525
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 346
gcctggtccg gggtgcgagc atcacgccta gaggctccca acgggccagg tggcaggtgg 60

gcgacagggg aaagggacac ctcactcttg gcggctgagc caggaacggc agaggaacat 120

tctgggcgcc cctactggcc ttttcctcgc cgccccattc ccgggtgaag ctgagagtaa 180

ttcatacaga agaactcgcc tttgcctcgg ggaatcccag ggaccgtggt taaactccca 240

ctaacttaaa agcgaaggat ctccggggcc ccgcccccgg ctctcgtcaa cctcggggtc 300

gagaggagca tgcgcaagga gctgggtacg ggtcagtggg ctcagcgcac atcgcccatg 360

gtccccgaga actggttggg gggaggggag aggggcggtg attgaacgag tgcctactgg 420

aggttgcgcg gtgtaaactg ggaaagtggt gtcgtgtgcg ggctccgccc tcttcccgag 480

ggtgggggag aaccgtatat aagtgccgta gtcgccctgg acgtt 525

<210> 347
<211> 220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 347
tggtgatgcg gttttggcag tacatcaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaac aactccgccc cattgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg 220

<210> 348
<211> 220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 348
tgctgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg 220

<210> 349
<211> 220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 349
tagtgatgcg gttttggcag tacatcaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaac aactccgccc cattgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg 220

<210> 350
<211> 220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 350
tggtgatgcg gttttggcag tacatcaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaac aactccgccc cattgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agcgcgcgtt tagtgaaccg 220

<210> 351
<211> 220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 351
tggtgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg 220

<210> 352
<211> 314
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 352
agtcattggg tttttccagc catttaatta aaacgccatg tactttccca ccattgacgt 60

caatgggcta ttgaaactaa tgcaacgtga cctttaaacg gtactttccc atagctgatt 120

aatgggaaag taccgttctc gagccaatac acgtcaatgg gaagtgaaag ggcagccaaa 180

acgtaacacc gccccggttt tcccctggaa attccatatt ggcactcatt ctattggctg 240

agctgcgttc tacgtgggta taagaggcgc gaccagcgtc ggtaccgtcg cagtcttcgg 300

tctgaccacc gtag 314

<210> 353
<211> 313
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 353
agtcattggg tttttccagc caatttataa aacgccatgt actttcccac cattgacgtc 60

aatgggctat tgaaactaat gcaacgtgac ctttaaacgg tactttccca tagctgatta 120

atgggaaagt accgttctcg agccaataca cgtcaatggg aagtgaaagg gcagccaaaa 180

cgtaacaccg ccccggtttt cccctggaaa ttccatattg gcacgcattc tattggctga 240

gctgcgttct acgtgggtat aagaggcgcg accagcgtcg gtaccgtcgc agtcttgggt 300

ctgaccaccg tag 313

<210> 354
<211> 315
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 354
agtcattggg tttttccagc caatttaatt aaaacgccat gtactttccc accattgacg 60

tcaatgggct attgaaacta atgcaacgtg acctttaaac ggtactttcc catagctgat 120

taatgggaaa gtaccgttct cgagccaata cacgtcaatg ggaagtgaaa gggcagccaa 180

aacgtaacac cgccccggtt ttcccctgga aattccatat tggcacgcat tctattggct 240

gagctgcgtt ctacgtgggt ataagaggcg cgaccagcgt cggtaccgtc gcagtcttcg 300

gtctgaccac cgtag 315

<210> 355
<211> 283
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 355
agtcattggg tttttccagc caatttataa aacgccatgt actttcccac cattgacgtc 60

aatgggctat tgaaactaat gcaacgtgac ctttaaacgg tactttccca tagctgatta 120

atgggaaagt accgttctcg agccaataca cgtcaatggg aagtgaaagg gcagccaaaa 180

cgtaacaccg ccccggtttt cccctggaaa ttccatattg gcacgcattc tattggctga 240

gctgcgttct acgtgggtat aagaggcgcg accagcgtcg gta 283

<210> 356
<211> 293
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 356
aaaggccatt gagtcaccac ccctatgctg ggaaatggtg aacgcccccc atgtggaaag 60

tccctatggg ccgccattag agtgcatgac cgtgctgatt catatgccat atgagtgtat 120

taggggggctt tccgcgtggg aaattgggta aaaagtcccc gtattactca catagggggc 180

gtttggcttt gcaaattagg ggatttcagt gcatttggca ttaaaaacta ttggttctag 240

tcataaaacg ggcggagtta accatataat tgctgtcccc catgccattc gag 293

<210> 357
<211> 238
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 357
tactaatggg gatttccaat gactaataca acgggcagta cgcccagtac gtatgactaa 60

tgggactttc cataatcccg ccccattgac gtcaatgggc atccgttctg gcaccaaaat 120

gaatgggaat ttccaatatg agtcataaac cccgccccat tgacgcacat tacacgtcaa 180

tgggcggtag gcgtgcccta tgggcggtct atataagcag agcccgttta gtgaaccg 238

<210> 358
<211> 783
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 358
tattaatagc aatcttagct aattaaaata gatagcgttt attgagcgtt gggtatcagg 60

cacggtccta attcttttag atgtctttag ttcgtttcac tctcccccaa acaatagggt 120

ggtattgatc acctccgagc aggtgaaatt gaggcacaga gaaatcctag tagctggtag 180

aagaacacgc agtgtggtca agctagcaag gtgtttggtc cactgctata tctacaaaac 240

ccctaacaat gcctggtgta tagatgctca gtatgcattt gtgggatcag tgattccgat 300

gcctgcttct tataaagttt ttatttagaa ataattacag gtaaggagtt gcaaaaacag 360

tatagtggga tcgagtgtcc tttttccctc ggcttctccc aggggtatcg tcttacgtaa 420

caatgtccaa acagggaaat tgacttgggt ataatccaca gactctattc accttgtaga 480

ttggttttaa tagaagtaac tggacaactt gtaagctaat atcgttgcta tggttctcgt 540

tctcagctaa aacggcgctc tttactttgt gcacctgaac actgcacacc gagggcgacc 600

accgcccccg agatgcccag cttctattct agagcgccgc gccggcgccg aatgggttaa 660

cgggcggggg gacacgcctc cgtgcgcttg cgcggcgtcc cttcgccccg ccttcgcagc 720

gcagtcacat gacccgccca accggcgtcc gcctataaaa agctgagtgt tgacgtcagc 780

gtt 783

<210> 359
<211> 335
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 359
ggatccaact tctaagtccg ttttttattg atctaaaagg ccttttgcga atcatcttga 60

aggcaatcgc gttctgagcc acctcagctt tggcacacag cgcggggact gtcgcgaggg 120

gtttagggcc caagcaggac acaccccgaa atctccgcag ccacccccac cccacgcccc 180

cggctcttga gggttaaatc gcaggcgcag gttctcgcac gcgcacatca tcccgcaggc 240

gagccccagc acccagccca gggtgcgcgc gcgccgtcac gtgacacgcc caaccggcgt 300

cgccgtataa aagcgcgggc gttgacgtca gcggt 335

<210> 360
<211> 335
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 360
ggatccaact tctaagtccg ttttttattg atctaaaagg ccttttgcga atcatcttga 60

aggcaatcgc gttctgagcc acctcagctt tggcacacag cgcggggact gtcgcgaggg 120

gtttagggcc caagcaggac acaccccgaa atctccgcag ccacccccac cccacgcccc 180

cggctcttga gggttaaatc gcaggcgctg gttctcgcac gcgcacatca tcccgcaggc 240

gagccccagc acccagccca gggtgcgcgc gcgccgtcac gtgacacgcc caaccggcgt 300

cgccgtataa aagcgcgggc gttgacgtca gcgtt 335

<210> 361
<211> 343
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 361
tgacttgggt ataatccaca gactctattc accttgtaga ttggttttaa tagaagtaac 60

tggacaactt gtaagctaat atcgttgcta tggttctcgt tctcagctaa aacggcgctc 120

tttactttgt gcacctgaac actgcacacc gagggcgacc accgcccccg agatgcccag 180

cttctattct agagcgccgc gccggcgccg aatgggttaa cgggcggggg gacacgcctc 240

cgtgcgcttg cgcggcgtcc cttcgccccg ccttcgcagc gcagtcacat gacccgccca 300

accggcgtcc gcctataaaa agctgagtgt tgacgtcagc gtt 343

<210> 362
<211> 329
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 362
cggtccgaat ttcaaagtct ttttcctatt gacctacaag gttttcaaga atcatgttgt 60

aagcaactgt gttctgagga atctatgttt aaaaacccat ccgtggatct tggcccaggg 120

tccagagact gagctagcca cgccccggcc gcgccgcagc cactcccacg gcagttcaag 180

tgttaagtcc caaagaccgc gctctgtgca tgcgcagacc cgtccacagc tggctcctag 240

ccaacccggc cggacgagca cccggcgccg tcacgtgacg cacccaaccg gcgtcgacct 300

ataaaaggcc gggcgttgac gtcagcggt 329

<210> 363
<211> 329
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 363
cggtccgaat ttcaaagtct ttttcctatt gacctacaag gttttcaaga atcatgttgt 60

aagcaactgt gttctgagga atctatgttt aaaaacccat ccgtggatct tggcccaggg 120

tccagagact gagctagcca cgccccggcc gcgccgcagc cactcccacg gcagttcaag 180

tgttaagtcc caaagaccgc gctctgtgca tgcgcagacc cgtccacagc tggctcctag 240

ccaacccggc cggacgagca cccggcgccg tcacgtgacg cacccaaccg gcgtcgacct 300

ataaaaggcc gggcgttgac gtcagcgtt 329

<210> 364
<211> 325
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 364
gggtccgaat ttcaaagtcc tttttattga cttacaaggt tttcaaggaa aatcttggaa 60

gtaactgtgt tccgaagaat ctacgtttaa aaaccgaccc ctggatcttt gccttgggtc 120

caaggaccga gctggccacg ccccagccgc gccgcagcca ctcccaaggc agttcaagtg 180

ttaagcccga aaggtagagc tctgcgcatg tgcacacccg tccatagctg ggtcccagcc 240

aaccaggccg gaggagcacc cgcgccgtca cgtgacgtgc ccaaccggcg tcgacctata 300

aaaggccggg cgttgacgtc agcgg 325

<210> 365
<211> 326
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 365
gggtccgaat ttcaaagtcc tttttattga cttacaaggt tttcaaggaa aatcttggaa 60

gtaactgtgt tccgaagaat ctacgtttaa aaaccgaccc ctggatcttt gccttgggtc 120

caaggaccga gctggccacg ccccagccgc gccgcagcca ctcccaaggc agttcaagtg 180

ttaagcccga aaggtagagc tctgcgcatg tgcacacccg tccatagctg ggtcccagcc 240

aaccaggccg gaggagcacc cgcgccgtca cgtgacgtgc ccaaccggcg tcgacctata 300

aaaggccggg cgttgacgtc agcgtt 326

<210> 366
<211> 169
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 366
ttcgccccgc cttcgcagcg cagtcacatg acccgcccaa ccggcgtccg cctataaaaa 60

gctgagtgtt gacgtcagcg ttctcttccg ccgtcgtcgc cgccatcctc ggcgcgactc 120

gcttctttcg gttctacctg ggagaatcca ccgccatccg ccaccacca 169

<210> 367
<211> 163
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 367
agcccagggt gcgcgcgcgc cgtcacgtga cacgcccaac cggcgtcgcc gtataaaagc 60

gcgggcgttg acgtcagcgt tctcttccgc cgcagccgcc gccatcgtcg gcgcccctcg 120

cacttctcct gtgcccgtga gaatccgtcg ccatccgcca cca 163

<210> 368
<211> 164
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 368
ggccggacga gcacccggcg ccgtcacgtg acgcacccaa ccggcgtcga cctataaaag 60

gccgggcgtt gacgtcagcg ttctcttccg ccgcagccgc cgccatcgtc ggcgcgcttc 120

cctgttcacc tctgactctg agaatccgtc gccatccgcc acca 164

<210> 369
<211> 280
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 369
tggtcgaggt gagccccacg ttctgcttca ctctccccat ctccccccccc tccccacccc 60

caattttgta tttatttatt ttttaattat tttgtgcagc gatgggggcg gggggggggg 120

gggcgcgcgc caggcggggc ggggcggggc gaggggcggg gcggggcgag gcggagaggt 180

gcggcggcag ccaatcagag cggcgcgctc cgaaagtttc cttttatggc gaggcggcgg 240

cggcggcggc cctataaaaa gcgaagcgcg cggcgggcgg 280

<210> 370
<211> 282
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 370
tggtcgaggt gagccccacg ttctgcttca ctctccccat ctccccccccc tccccacccc 60

caattttgta tttatttatt ttttaattat tttgtgcagc gatgggggcg gggggggggg 120

gggggcgcgc gccaggcggg gcggggcggg gcgaggggcg gggcggggcg aggcggagag 180

gtgcggcggc agccaatcag agcggcgcgc tccgaaagtt tccttttatg gcgaggcggc 240

ggcggcggcg gccctataaa aagcgaagcg cgcggcgggc gg 282

<210> 371
<211> 280
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 371
tggtcgaggt gagccccacg ttctgcttca ctctccccat ctccccccccc tccccacccc 60

caattttgta tttatttatt ttttaattat tttgtgcagc gatgggggcg gggggggggg 120

gggcgcgcgc caggtggggc ggggcggggc gaggggcggg gcggggcgag gcggagaggt 180

gcggcggcag ccaatcagag cggcgcgctc cgaaagtttc cttttatggc gaggcggcgg 240

cggcggcggc cctataaaaa gcgaagcgcg cggcgggcgg 280

<210> 372
<211> 283
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 372
tgggtcgagg tgagccccac gttctgcttc actctcccca tctccccccc ctccccaccc 60

ccaattttgt atttatttat tttttaatta ttttgtgcag cgatgggggc gggggggggg 120

ggggcgcgcg ccaggcgggg cggggcgggg cgaggggcgg ggcggggcga ggcggagagg 180

tgcggcggca gccaatcaga gcggcgcgct ccgaaagttt ccttttatgg cgaggcggcg 240

gcggcggcgg ccctataaaa agcgaagcgc gcggcgggcg gga 283

<210> 373
<211> 270
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 373
tctctctttt ttttttttt ttttttttt tttccaaaag gaggggagag ggggtaaaaa 60

aatgctgcac tgtgcggcta ggccggtgag tgagcggcgc ggagccaatc agcgctcgcc 120

gttccgaaag ttgcctttta tggctcgagt ggccgctgtg gcgtcctata aaacccggcg 180

gcgcaacgcg cagccactgt cgagtccgcg tccacccgcg agcacaggcc tttcgcagct 240

ctttcttcgc cgctccacac ccgccaccag 270

<210> 374
<211> 294
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 374
tcaatctcgc tttctctctc gctttttttt ttttcttct tcttttttt ttttttttc 60

aaaaggaggg gagagggggt aaaaaaatgc tgcactgtgc ggcgaggccg gtgagtgagc 120

gacgcggagc caatcagcgc ccgccgttcc gaaagttgcc ttttatggct cgagtggccg 180

ctgtggcgtc ctataaaacc cggcggcgca acgcgcagcc actgtcgagt cgcgtccacc 240

cgcgagcaca gcttctttgc agctccttcg ttgccggtcc acacccgcca ccag 294

<210> 375
<211> 230
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 375
tcaatctcgc tttctctctc gctttttttt ttttcttctt ctttttttt ttttttttca 60

aaaggagggg agaggggtа aaaaaatgct gcactgtgcg gcgaggccgg tgagtgagcg 120

acgcggagcc aatcagcgcc cgccgttccg aaagttgcct tttatggctc gagtggccgc 180

tgtggcgtcc tataaaaccc ggcggcgcaa cgcgcagcca ctgtcgagtc 230

<210> 376
<211> 308
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 376
acctcttcct caactcactt ctctctactc tcacttttt ttttcttctt ctttttttt 60

ttttttttt ttttttttt tgcaaaagaa gggggtaaaa aaatgctgca ctgtcgggcg 120

aggccggtga gtgagcgagc cggagccaat cagcgcccgc cgttccgaaa ttgcctttta 180

tggctcgagt ggccgctgtg gcgtcctata aaacccggcg gcgcaacgcg cgccactgtc 240

gagtccgcgt ccacccgcga gtacaacctc cttgcagctc ctccgtcccg gtccacaccc 300

gccaccag 308

<210> 377
<211> 253
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 377
gcccagcacc ccaaggcggc caacgccaaa actctccctc ctcctcttcc tcaatctcgc 60

tctcgctctt ttttttttc gcaaaaggag gggagagggg gtaaaaaaat gctgcactgt 120

gcggcgaagc cggtgagtga gcggcgcggg gccaatcagc gtgcgccgtt ccgaaagttg 180

ccttttatgg ctcgagcggc cgcggcggcg ccctataaaa cccagcggcg cgacgcgcca 240

ccaccgccga gtc 253

<210> 378
<211> 61
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 378
ttgcctttta tggctcgagt ggccgctgtg gcgtcctata aaacccggcg gcgcaacgcg 60

c 61

<210> 379
<211> 494
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 379
atgacgtcga ggagaagttc cccaactttc ccgcctctca gcctttgaaa gaaagaaagg 60

ggaggggca ggccgcgtgc agccgcgagc ggtgctgggc tccggctcca attccccatc 120

tcagtcgttc ccaaagtcct cctgtttcat ccaagcgtgt aagggtcccc gtccttgact 180

ccctagtgtc ctgctgccca cagtccagtc ctgggaacca gcaccgatca cctcccatcg 240

ggccaatctc agtcccttcc cccctacgtc ggggcccaca cgctcggtgc gtgcccagtt 300

gaaccaggcg gctgcggaaa aaaaaaagcg gggagaaagt agggcccggc tactagcggt 360

tttacgggcg cacgtagctc aggcctcaag accttgggct gggactggct gagcctggcg 420

ggaggcgggg tccgagtcac cgcctgccgc cgcgcccccg gtttctataa attgagcccg 480

cagcctcccg cttc 494

<210> 380
<211> 486
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 380
tttttgtaga aatgtcttgg tgtcctcgtc caatcaggta gccatctctg aaatatctgg 60

ctccgttgca actccgaacg acctgctggc aacgtaaaat tctccggggt aaaacttaaa 120

tgtggagtaa tggaaccaga aacatctctt cccttctctc tccttccacc gcccgttacc 180

gtccctagga aattttactc tgctggagag cttcttctac ggccccttg cagcaatgca 240

cttcccagca ttacgttgcg ggtaaaacgg aggtcgtgta cccgacctag cagcccaggg 300

atggaaaagt cccggccgtc gctggcaata atagcgggcg gacgcatgtc atgagattat 360

tggaaaccac cagaatcgaa tataaaaggc gaacaccttt cccaattttg gtttctcctg 420

acccaaagac tttaaattta atttatttgt ccctatttca atcaattgaa caactatcaa 480

aacaca 486

<210> 381
<211> 486
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 381
tttttgtaga aatgtcttgg tgtcctcgtc caatcaggta gccatctctg aaatatctgg 60

ctccgttgca actccgaacg acctgctggc aacgtaaaat tctccggggt aaaacttaaa 120

tgtggagtaa tggaaccaga aacgtctctt cccttctctc tccttccacc gcccgttacc 180

gtccctagga aattttactc tgctggagag cttcttctac ggccccttg cagcaatgct 240

cttcccagca ttacgttgcg ggtaaaacgg aggtcgtgta cccgacctag cagcccaggg 300

atggaaaagt cccggccgtc gctggcaata atagcgggcg gacgcatgtc atgagattat 360

tggaaaccac cagaatcgaa tataaaaggc gaacaccttt cccaattttg gtttctcctg 420

acccaaagac tttaaattta atttatttgt ccctatttca atcaattgaa caactatcaa 480

aacaca 486

<210> 382
<211> 486

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 382
tttttgtaga aatgtcttgg tgtcctcgtc caatcaggta gccatctctg aaatatctgg 60

ctccgttgca actccgaacg acctgctggc aacgtaaaat tctccggggt aaaacttaaa 120

tgtggagtaa tggaaccaga aacgtctctt cccttctctc tccttccacc gcccgttacc 180

gtccctagga aattttactc tgctggagag cttcttctac ggccccccttg cagcaatgct 240

ctacccagca ttacgttgcg ggtaaaacgg aggtcgtgta cccgacctag cagcccaggg 300

atggaaaagt cccggccgtc gctggcaata atagcgggcg gacgcatgtc atgagattat 360

tggaaaccac cagaatcgaa tataaaaggc gaacaccttt cccaattttg gtttctcctg 420

acccaaagac tttaaattta atttatttgt ccctatttca atcaattgaa caactatcaa 480

aacaca 486

<210> 383
<211> 843
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 383
taccaaaaaa cctggagaag ttcctcagct tgcccgcctc ccagcctttg aaagaatagg 60

ggaaaggggt ggcgcgtgct gtccccaggc gaccgggctc aggctccgac tccccatgcc 120

agccgctccc gggtcgtccg tgcggcccct tggcgcggcc tgggctcctg gacctctctg 180

gttcccacca ggatccccat ccccgagtct atagtggctt gcgtgcccat agtcccgtcc 240

cgggaacctt tagccatcac tgcccccgcg ggccacctcg gtcccctccc cctctcaggc 300

ctgggcccac atgcctggtg cgtgcactgg ggaacaaggc gggcccgcaa aaagaaaaac 360

gaggaggccc ggctactcgc gggtttacgg gcgcacgtag ctcaggcctc ctcgcccttg 420

ggctgggact gggcgagcag cacgggaggc ggggcgcacg tcacccacgc cccgccgccc 480

ccagtcccta taaattgagg ctgcgggttc ctccggtgct ctctgctccg ccccgttcga 540

caggcagccg cttcttctcg tgcagtgcta ggtgaccaag gcagaggccg tgggggcttg 600

ggggccggcg ggaggagggg gcgtgctggc cggggcttgg gcagccccga ggcggtgctg 660

ggcccccaga gcggagccgc cgggcggggt cccgcattgc aggggcgagc agagtacgtg 720

ccgtgccctg gggtgggaat ggaggccggg gggaggggcg ccgagggctc tggccgctgg 780

gctttgccga ctgccctgat gctcactctc ctctccccac agcgcgtccc cgagactgcc 840

acc 843

<210> 384
<211> 799
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 384
atcctcaact tttccacagc ctttgcataa aggggagagg gtcggcggtg cagctgtggc 60

acacacgcac ttctgctcaa cccgcccccc cccgcccccg ttcctgttcc ttcccaggtt 120

ctccccattt tatcggggcg gcaactttta ggtccctggg tcctggaagt ccttagtaca 180

cactcttcgt ccttaagtcc atagtctgta ttccctcggt cctatcctgt cccccatcac 240

cgggtcacct ccccagcgaa gcaatctcag ttcccctccc cctctcagcc ccgagcccac 300

acgtttggtg cgtgcacatt tcaaaaacga ggcgggtcca aagagagggg gtggggaggt 360

gccgagtggc ccagctactc gcggctttac gggtgcacgt agctcaggcc tcagcgccct 420

tgagctgtga ctggatggat gagcggggcg ggaggcgggg cgagcgtcct cggcgctccc 480

caccacccca gttcctataa atacggactg cagccctccc cggtgctctc tgctcctccc 540

tgttctagag acagccgcat ctttccgtgc agtgccaggt gaaaaccgca gagtgggccg 600

caggtggccg gggacggtcg gaaacgggga agggggcgc tcagcccggg actgcgggcg 660

ctggggcgag ctccactgcc cgagcccggg ctccgcattg cagaggctgg agggggaagg 720

gatggggggc gcggcggggg gcacgctgac ctctctttct tctctctccc tccgcagcct 780

cgctccggag actgccacc 799

<210> 385
<211> 163
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 385
ggagacgcct tgggctggga ctggctgagc ctggcgggag gcggggtccg agtcaccgcc 60

tgccgccgcg cccccggttt ctataaattg agcccgcagc ctcccgcttc gctctctgct 120

cctcctgttc gacagtcagc cgcatcttct tttgcgtcgc cag 163

<210> 386
<211> 185
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 386
ggagacggca cgtagctcag gcctcaagac cttgggctgg gactggctga gcctggcggg 60

aggcggggtc cgagtcaccg cctgccgccg cgcccccggt ttctataaat tgagcccgca 120

gcctcccgct tcgctctctg ctcctcctgt tcgacagtca gccgcatctt cttttgcgtc 180

gccag 185

<210> 387
<211> 224
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 387
ggagacgggg agaaagtagg gcccggctac tagcggtttt acgggcgcac gtagctcagg 60

cctcaagacc ttgggctggg actggctgag cctggcggga ggcggggtcc gagtcaccgc 120

ctgccgccgc gcccccggtt tctataaatt gagcccgcag cctcccgctt cgctctctgc 180

tcctcctgtt cgacagtcag ccgcatcttc ttttgcgtcg ccag 224

<210> 388
<211> 275
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 388
ggagacgacg ctcggtgcgt gcccagttga accaggcggc tgcggaaaaa aaaaagcggg 60

gagaaagtag ggcccggcta ctagcggttt tacgggcgca cgtagctcag gcctcaagac 120

cttgggctgg gactggctga gcctggcggg aggcggggtc cgagtcaccg cctgccgccg 180

cgcccccggt ttctataaat tgagcccgca gcctcccgct tcgctctctg ctcctcctgt 240

tcgacagtca gccgcatctt cttttgcgtc gccag 275

<210> 389
<211> 122
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 389
ggagacgcga gtcaccgcct gccgccgcgc ccccggtttc tataaattga gcccgcagcc 60

tcccgcttcg ctctctgctc ctcctgttcg acagtcagcc gcatcttctt ttgcgtcgcc 120

ag 122

<210> 390
<211> 167
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 390
ggagacgcag ctccccccac catccagttc ctataaatac ggactgcagc cctccctggt 60

gctctctgct cctccctgtt ctagagacag ccgcatcttc ttgtgcagtg ccaggctctc 120

tgctcctcct gttcgacagt cagccgcatc ttcttttgcg tcgccag 167

<210> 391
<211> 190
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 391
ggagacggcg ggaggcgggg cgcgcgtcat cagctccccc caccatccag ttcctataaa 60

tacggactgc agccctccct ggtgctctct gctcctccct gttctagaga cagccgcatc 120

ttcttgtgca gtgccaggct ctctgctcct cctgttcgac agtcagccgc atcttctttt 180

gcgtcgccag 190

<210> 392
<211> 211
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 392
ggagacgagc tgggactgga tgagccgagc gggaggcggg gcgcgcgtca tcagctcccc 60

ccaccatcca gttcctataa atacggactg cagccctccc tggtgctctc tgctcctccc 120

tgttctagag acagccgcat cttcttgtgc agtgccaggc tctctgctcc tcctgttcga 180

cagtcagccg catcttcttt tgcgtcgcca g 211

<210> 393
<211> 239
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 393
ggagacggca cgtagctcag gcctctgcgc ccttgagctg ggactggatg agccgagcgg 60

gaggcggggc gcgcgtcatc agctcccccc accatccagt tcctataaat acggactgca 120

gccctccctg gtgctctctg ctcctccctg ttctagagac agccgcatct tcttgtgcag 180

tgccaggctc tctgctcctc ctgttcgaca gtcagccgca tcttcttttg cgtcgccag 239

<210> 394
<211> 278
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 394
ggagacgggg aatgagagag gcccagctac tcgcggcttt acgggtgcac gtagctcagg 60

cctctgcgcc cttgagctgg gactggatga gccgagcggg aggcggggcg cgcgtcatca 120

gctcccccca ccatccagtt cctataaata cggactgcag ccctccctgg tgctctctgc 180

tcctccctgt tctagagaca gccgcatctt cttgtgcagt gccaggctct ctgctcctcc 240

tgttcgacag tcagccgcat cttcttttgc gtcgccag 278

<210> 395
<211> 413
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 395
ggagacgtcc tatcctggga accctcatcc ggtcacttcc tcggcgggac aatctcagct 60

cccctccccc tctcaggtcg gagcccacac gcttggtgcg tgcacatttc aaaaacgagg 120

cgggtccaaa aagagggagg gggggaatga gagaggccca gctactcgcg gctttacggg 180

tgcacgtagc tcaggcctct gcgcccttga gctgggactg gatgagccga gcgggaggcg 240

gggcgcgcgt catcagctcc ccccaccatc cagttcctat aaatacggac tgcagccctc 300

cctggtgctc tctgctcctc cctgttctag agacagccgc atcttcttgt gcagtgccag 360

gctctctgct cctcctgttc gacagtcagc cgcatcttct tttgcgtcgc cag 413

<210> 396
<211> 508
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 396
tctaccgggt aggggaggcg cttttcccaa ggcagtctgg agcatgcgct ttagcagccc 60

cgctgggcac ttggcgctac acaagtggcc tctggcctcg cacacattcc acatccaccg 120

gtaggcgcca accggctccg ttctttggtg gcccccttcgc gccaccttct actcctcccc 180

tagtcaggaa gttccccccc gccccgcagc tcgcgtcgtg caggacgtga caaatggaag 240

tagcacgact cactagtctc gtgcagatgg acagcaccgc tgagcaatgg aagcgggtag 300

gcctttgggg cagcggccaa tagcagcttt gctccttcgc tttctgggct cagaggctgg 360

gaaggggtgg gtccgggggc gggctcaggg gcgggctcag gggcggggcg ggcgcccgaa 420

ggtcctccgg aggcccggca ttctgcacgc ttcaaaagcg cacgtctgcc gcgctgttct 480

cctcttcctc atctccgggc ctttcgtc 508

<210> 397
<211> 460
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 397
ctaccgggta ggggaggcgc ttttcccaag gcagtctgga gcatgcgctt tagcagcccc 60

gctgggcact tggcgctaca caagtggcct ctggcctcgc acacattcca catccaccgg 120

taggcgccaa ccggctccgt tctttggtgg ccccttcgcg ccaccttcta ctcctcccct 180

agtcaggaag ttcccccccg ccccgcagct cgcgtcgtgc aggacgtgac aaatggaagt 240

agcacgactc actagtctcg tgcagatgga cagcaccgct gagcaatgga agcgggtagg 300

cctttggggc agcggccaat agcagctttg ctccttcgct ttctgggctc aggggcgggg 360

cgggcgcccg aaggtcctcc ggaggcccgg cattctgcac gcttcaaaag cgcacgtctg 420

ccgcgctgtt ctcctcttcc tcatctccgg gcctttcgtc 460

<210> 398
<211> 466
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 398
cggggttggg gttgcgcctt ttccaaggca gccctgggtt tgcgcaggga cgcggctgct 60

ctgggcgtgg ttccgggaaa cgcagcggcg ccgaccctgg gcctcgcaca ttcttcacgt 120

ccgttcgcag cgtcacccgg atcttcgccg ctacccttgt gggcccccgg gcgacgcttc 180

ctcgtccgcc cctaagtcgg gaaggttcct tgcggttcgc ggcgtgccgg acgtgacaaa 240

cggaagccgc acgtctcact agtaccctcg cagacggaca gcgccaggga gcaatggcag 300

cgcgccgacc gcgatgggct gtggccaata gcggctgctc agcagggcgc gccgagagca 360

gcggccggga aggggcggtg cgggaggcgg ggtgtggggc ggtagtgtgg gccctgttcc 420

tgcccgcgcg gtgttccgca ttctgcaagc ctccggagcg cacgtc 466

<210> 399
<211> 458
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 399
tctaccgggt aggggaggcg cttttcccaa ggcagtctgg agcatgcgct ttagcagccc 60

cgctgggcac ttggcgctac acaagtggcc tctggcctcg cacacattcc acatccaccg 120

gtaggcgcca accggctccg ttctttggtg gcccccttcgc gccaccttct actcctcccc 180

tagtcaggaa gttccccccc gccccgcagc tcgcgtcgtg caggacgtga caaatggaag 240

tagcacgact cactagtctc gtgcagatgg acagcaccgc tgagcaatgg aagcgggtag 300

gcctttgggg cagcggccaa tagcagcttt gctccttcgc tttctgagag cagcggccgg 360

gaaggggcgg tgcgggaggc ggggtgtggg gcggtagtgt gggccctgtt cctgcccgcg 420

cggtgttccg cattctgcaa gcctccggag cgcacgtc 458

<210> 400
<211> 523
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 400
cacgggtggg ggtgagcgct tttcctaagg cagcctagga ctaaagcagc gccacagata 60

ctttgggtgt ggctcctgaa ccgcggctgc agaagctacg ggcctctcaa actttccacg 120

tccaagtcgt agcacgacgc agctcccttc cgccccacct gcaggtcgct cgatgccgcc 180

tctcgctccg cccctagtca ggaaggttcc cccgcagctc gcagcgtgcc ggacgtgaca 240

aatggaagcc gcacgtccca ccagtaccct cgcagacgga cagcgccttg gagcaatggc 300

agcgagccgg ccccttgggg ccagggccaa tagcggccgc tctgcttggc gcgccctgag 360

ccgcggccgg gaaggggcgg tgcgggaggc ggggcgtcgg ggggcggtgc gggcgcgctc 420

ccggtgggcg aggtgctcag cattctgcac gcgtctggac agcgcgtcgg tcgcattatc 480

cttctctcag tctccaacct ctcgccctcg ccttattgcc acc 523

<210> 401
<211> 527
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 401
cacggggttg gggttgcgcc ttttccaagg cagccctggg tttgcgcagg gatgcggctg 60

ctctgggcgt ggttccggga aacgcagcgg cgccgacctt gggtcttgca cattcttcac 120

gtccgttcgc agcgtcaccc ggatcttcgc cgctaccctt gtgggccccc cggcgacgct 180

tcctgctccg cccctaagtc gggaaggttc cttgcggttc gcggcgtgcc ggacgtgaca 240

aacggaagcc gcacctctca ctagtaccct cgcagacgga cagcgccaag gagcaatggc 300

agcgcgccga ccgcgatggg ctgtggccaa tagcggctgc tcagcagggc gcgccgggag 360

cagcggccgg gaaggggcgg tgcgggaggc ggggtgtggg gcggtagtgt ggcccctgtt 420

cctgcccgcg cggtgttcgg cattctgcaa gcctccggag cggacgtcag cagtcggctc 480

cctcgttgac cgaatcaccg acctctctcc ccagctgtat tgccacc 527

<210> 402
<211> 660
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 402
tctaccgggt aggggaggcg cttttcccaa ggcagtctgg agcatgcgct ttagcagccc 60

cgctgggcac ttggcgctac acaagtggcc tctggcctcg cacacattcc acatccaccg 120

gtaggcgcca accggctccg ttctttggtg gcccccttcgc gccaccttct actcctcccc 180

tagtcaggaa gttccccccc gccccgcagc tcgcgtcgtg caggacgtga caaatggaag 240

tagcacgact cactagtctc gtgcagatgg acagcaccgc tgagcaatgg aagcgggtag 300

gcctttgggg cagcggccaa tagcagcttt gctccttcgc tttctgggct caggggcggg 360

gcgggcgccc gaaggtcctc cggaggcccg gcattctgca cgcttcaaaa gcgcacgtct 420

gccgcgctgt tctcctcttc ctcatctccg ggcctttcgt caagcttgga cacaagacag 480

gcttgcgaga tatgtttgag aataccactt tatcccgcgt cagggagagg cagtgcgtaa 540

aaagacgcgg actcatgtga aatactggtt tttagtgcgc cagatctcta taatctcgcg 600

caacctattt tcccctcgaa cacttttaa gccgtagata aacaggctgg gacacttcac 660

<210> 403
<211> 1092
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 403
aagtttccag agctttcgag gaaggtttct tcaactcaaa ttcatccgcc tgataatttt 60

cttatatttt cctaaagaag gaagagaagc gcatagagga gaagggaaat aatttttag 120

gagcctttct tacggctatg aggaatttgg ggctcagttg aaaagcctaa actgcctctc 180

gggaggttgg gcgcggcgaa ctactttcag cggcgcacgc agacggcgtc tacgtgaggg 240

gtgataagtg acgcaacact cgttgcataa atttgcgctc cgccagcccg gagcatttag 300

gggcggttgg ctttgttggg tgagcttgtt tgtgtccctg tgggtggacg tggttggtga 360

ttggcaggat cctggtatcc gctacaggta ctggcccaca gccgtaaaga gctgcggggg 420

cgtgagaggg gggaatgggt gaggtcaagc tggaggcttc ttggggttgg gtgggccgct 480

gaggggaggg gagggcgagg tgacgcgaca cccggccttt ctgggagagt gggccttgtt 540

gacctaaggg gggcgagggc agttggcacg cgcacgcgcc gacagaaact aacagacatt 600

aaccaacagc gattccgtcg cgtttacttg ggaggaaggc ggaaaagagg tagtttgtgt 660

ggcttctgga aaccctaaat ttggaatccc agtatgagaa tggtgtccct tcttgtgttt 720

caatgggatt tttacttcgc gagtcttgtg ggtttggttt tgttttcagt ttgcctaaca 780

ccgtgcttag gtttgaggca gattggagtt cggtcggggg agtttgaata tccggaacag 840

ttagtgggga aagctgtgga cgcttggtaa gagagcgctc tggattttcc gctgttgacg 900

ttgaaacctt gaatgacgaa tttcgtatta agtgacttag ccttgtaaaa ttgaggggag 960

gcttgcggaa tattaacgta tttaaggcat tttgaaggaa tagttgctaa ttttgaagaa 1020

tattaggtgt aaaagcaaga aatacaatga tcctgaggtg acacgcttat gttttacttt 1080

taaactaggt ca 1092

<210> 404
<211> 215

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 404
cagctgcttc atccccgtgg cccgttgctc gcgtttgctg gcggtgtccc cggaagaaat 60

atatttgcat gtctttagtt ctatgatgac acaaaccccg cccagcgtct tgtcattggc 120

gaaaacacgc agatgcagtc ggggcggcgc ggtcccaggt ccacttcgca tattaaggtg 180

acgcgtgtgg cctcgaacac agagcgactc tgcag 215

<210> 405
<211> 753
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 405
aaatgagtct tcggacctcg cgggggccgc ttaagcggtg gttagggttt gtctgacgcg 60

gggggagggg gaaggaacga aacactctca ttcggaggcg gctcggggtt tggtcttggt 120

ggccacgggc acgcagaaga gcgccgcgat cctcttaagc acccccccgc cctccgtgga 180

ggcgggggtt tggtcggcgg gtggtaactg gcgggccgct gactcgggcg ggtcgcgcgc 240

cccagagtgt gacctttttcg gtctgctcgc agacccccgg gcggcgccgc cgcggcggcg 300

acgggctcgc tgggtcctag gctccatggg gaccgtatac gtggacaggc tctggagcat 360

ccgcacgact gcggtgatat taccggagac cttctgcggg acgagccggg tcacgcggct 420

gacgcggagc gtccgttggg cgacaaacac caggacgggg cacaggtaca ctatcttgtc 480

acccggaggc gcgagggact gcaggagctt cagggagtgg cgcagctgct tcatccccgt 540

ggcccgttgc tcgcgtttgc tggcggtgtc cccggaagaa atatatttgc atgtctttag 600

ttctatgatg acacaaaccc cgcccagcgt cttgtcattg gcgaattcga acacgcagat 660

gcagtcgggg cggcgcggtc ccaggtccac ttcgcatatt aaggtgacgc gtgtggcctc 720

gaacaccgag cgaccctgca gcgacccgct taa 753

<210> 406
<211> 270
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 406
cagtgtggtt ttcaagagga agcaaaaagc ctctccaccc aggcctggaa tgtttccacc 60

caatgtcgag cagtgtggtt ttgcaagagg aagcaaaaag cctctccacc caggcctgga 120

atgtttccac ccaatgtcga gcaaaccccg cccagcgtct tgtcattggc gaattcgaac 180

acgcagatgc agtcggggcg gcgcggtccc aggtccactt cgcatattaa ggtgacgcgt 240

gtggcctcga acaccgagcg accctgcagg 270

<210> 407
<211> 149
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 407
tcccgcccct aactccgccc agttccgccc attctccgcc ccatggctga ctaatttttt 60

ttatttatgc agaggccgag gccgcctcgg cctctgagct attccagaag tagtgaggag 120

gctttttgg aggtataggc ttttgcaaa 149

<210> 408
<211> 128
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 408
gttccgccca ttctccgccc catggctgac taatttttt tatttatgca gaggccgagg 60

ccgcctcggc ctctgagcta ttccagaagt agtgaggagg ctttttgga ggcctaggct 120

tttgcaaa 128

<210> 409
<211> 408
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 409
cagctgcttc atccccgtgg cccgttgctc gcgtttgctg gcggtgtccc cggaagaaat 60

atatttgcat gtctttagtt ctatgatgac acaaaccccg cccagcgtct tgtcattggc 120

gaaaacacgc agatgcagtc ggggcggcgc ggtcccaggt ccacttcgca tattaaggtg 180

acgcgtgtgg cctcgaacac agagcgactc tgcagggaca caagacaggc ttgcgagata 240

tgtttgagaa taccacttta tcccgcgtca gggagaggca gtgcgtaaaa agacgcggac 300

tcatgtgaaa tactggtttt tagtgcgcca gatctctata atctcgcgca acctattttc 360

ccctcgaaca ctttttaagc cgtagataaa caggctggga cacttcac 408

<210> 410
<211> 193
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 410
ggacacaaga caggcttgcg agatatgttt gagaatacca ctttatcccg cgtcagggag 60

aggcagtgcg taaaaagacg cggactcatg tgaaatactg gtttttagtg cgccagatct 120

ctataatctc gcgcaaccta ttttcccctc gaacactttt taagccgtag ataaacaggc 180

tgggacactt cac 193

<210> 411
<211> 318
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 411
ctcactctct tccgcatcgc tgtctgcgag ggccagctgt tgggctcgcg gttgaggaca 60

aactcttcgc ggtctttcca gtactcttgg atcggaaacc cgtcggcctc cgaacggtac 120

tccgccaccg agggacctga gcgagtccgc atcgaccgga tcggaaaacc tctcgagaaa 180

ggcgtctaac cagtcacagt cgcaaggtag gctgagcacc gtggcgggcg gcagcgggtg 240

gcggtcgggg ttgtttctgg cggaggtgct gctgatgatg taattaaagt aggcggtctt 300

gagagggcgg atggtcga 318

<210> 412
<211> 827
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 412
gtaagtaccg cctatagagt ctataggccc acccccttgg cttcttatgc atgctatact 60

gtttttggct tggggtctat acacccccgc ttcctcatgt tataggtgat ggtatagctt 120

agcctatagg tgtgggttat tgaccattat tgaccactcc cctattggtg acgatacttt 180

ccattactaa tccataacat ggctctttgc cacaactctc tttattggct atatgccaat 240

acactgtcct tcagagactg acacggactc tgtatttta caggatgggg tctcatttat 300

tatttacaaa ttcacatata caacaccacc gtccccagtg cccgcagttt ttattaaaca 360

taacgtggga tctccacgcg aatctcgggt acgtgttccg gacatgggct cttctccggt 420

agcggcggag cttctacatc cgagccctgc tcccatgcct ccagcgactc atggtcgctc 480

ggcagctcct tgctcctaac agtggaggcc agacttaggc acagcacgat gcccaccacc 540

accagtgtgc cgcacaaggc cgtggcggta gggtatgtgt ctgaaaatga gctcggggag 600

cgggcttgca ccgctgacgc atttggaaga cttaaggcag cggcagaaga agatgcaggc 660

agctgagttg ttgtgttctg ataagagtca gaggtaactc ccgttgcggt gctgttaacg 720

gtggagggca gtgtagtctg agcagtactc gttgctgccg cgcgcgccac cagacataat 780

agctgacaga ctaacagact gttcctttcc atgggtcttt tctgcag 827

<210> 413
<211> 827
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 413
gtaagtaccg cctatagagt ctataggccc acccccttgg cttcttatgc atgctatact 60

gtttttggct tggggtctat acacccccgc ttcctcatgt tataggtgat ggtatagctt 120

agcctatagg tgtgggttat tgaccattat tgaccactcc cctattggtg acgatacttt 180

ccattactaa tccataacat ggctctttgc cacaactctc tttattggct atatgccaat 240

acactgtcct tcagagactg acacggactc tgtattttta caggatgggt tctcatttat 300

tatttacaaa ttcacatata caacaccacc gtccccagtg cccgcagttt ttattaaaca 360

taacgtggga tctccacgcg aatctcgggt acgtgttccg gacatgggtt cttctccggt 420

agcggcggag cttctacatc cgagccctgc tcccatgcct ccagcgactc atggtcgctc 480

ggcagctcct tgctcctaac agtggaggcc agacttaggc acagcacgat gcccaccacc 540

accagtgtgc cgcacaaggc cgtggcggta gggtatgtgt ctgaaaatga gctggggag 600

cgggcttgca ccgctgacgc atttgaaaga cttaaggcag cggcagaaga agatgcaggc 660

agctgagttg ttgtgttctg ataagagtca gaggtaactc ccgttgcggt gctgttaacg 720

gtggagggca gtgtagtctg agcagtactc gttgctgccg cgcgcgccac cagacataat 780

agctgacaga ctaacagact gttcctttcc atgggtcttt tctgcag 827

<210> 414
<211> 825
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 414
gtaagtagac caaggccttt tattggctgc ggtgttaagg caagctgcct gtctatccct 60

atctatctac tatccacctg gctctctagc tccatactgc gtacggtgtt tgttagctta 120

gggtgatagc aagtagaacg ctggtgatgg ttgctctcta tcagtttagc gctggtgatg 180

gtggcctcct tctccatttc ttatatatat atgctggtga tggtccctct tccatggccg 240

cggtgtgctt cggtgccggg taccgtaacg tggtacagaa aaaggcctga cacgtacgcg 300

tctctcccta ggatgctatg tgtctgtagc accggcggag cttgcgagct cgatgtccaa 360

gatagagtct ccatgactgc tcagatcgtc tcctgtgttc acacaccaga tattacaagc 420

gacggccgcc atgataagtc caaaaatgag cagaatacag aatattgtac tcagaggctg 480

cagccatctt ggtggcctgc tgtggtgctc ttttcccgtg gaggactccg tcagttcctg 540

cgtgttgttg ctcgtactgc gaagatctct cttgccccgt cctgaaaacc taggccctga 600

cagaaaaaag ggagagttag gagagggcac agaggattct gtctgtgtca agggggcttc 660

catgttgttt ctttacctga gatctcttcc accagttgtt ttttatcagc aactgacagg 720

tagtatatca aaatgagtgc actgatgatt attagcactg tatactttag atatcttctg 780

gtctctgtgg acatctgttg atgataaaaa attatatttt tttag 825

<210> 415
<211> 1246
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 415
gtaaggttgc attgggctcg gctatgggac ggggatttgg cccggtactt taatatgggt 60

ggggtcttat gggtaggggg cttattaata taacgccccc tacccataca tattgcgtca 120

cgtaattaga agccccctac cacgccattg gcgcccgccc atagcggtac tttcggttct 180

atacaagatg gctaccgcgg ttttcgatcg ctcccggggg tctcatttct atagctggaa 240

agcatccgac ccccatgatc tgtgccttag accccagggt acgtgcctgg ataggtgggc 300

gacccctagc ggctgcttgt atttttatat cagagatcga aaatcacagc cgcccgtaac 360

agctgtcagg gctatacaag atggcgaccg ctactttcga tcgctttttc ttccctcgat 420

cctgcttccg aaacgcaacc cacccccggg gtatgtgcct tagaccctat agatgccccc 480

caggacgcag gaaaaatttt agctcccctc tataatttta ttcgagcgat cgaaatccgc 540

ggaccgcccg ggtttttact ttcgttttct cggtcgccgc tcggctcgga ttccgagcag 600

aaaaagggct agaaagctgc gctcacctgc cgaaacgcgt tgttcggatc atcccgggag 660

ggccagcgta gtctccgttg ctgggttcgg ccgagggatc gagtcgagcg ggcggcggga 720

cgccgggaac gagagaggat cgggagcggg cgcccgggtg gctcgggagc ggccgggaga 780

cggtctgcag agctccagag ctgcgtgtcc tgacactgaa cagttgggaa aaatactgga 840

tcttataatg acccagggga aggggtccga gatcctccca gtgtccgaga ctgccaagag 900

acactcctgt tgaaaagcag ctctaaaacg ttttcctgct catctctgcc agacccccgc 960

ccactgacag agctcaattg atagcagatg tcctctttgg aaggacacac gcttccacaa 1020

acaccgttcc tcactgaggt gcattgtctg ggagggaagg tcaccttctt gttcattgtg 1080

gacggtgtgc ggcccaggcc tcggacgacc ctggcccggg cttccttctt cctgatccag 1140

gtagattgac gtgcggacat cgcgaacgac cgcagtcttc ctgatctttg aatgactcga 1200

gtacatgagc gcacctttcg agactgatct ctcttgttct ccatag 1246

<210> 416
<211> 1246
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 416
gtaaggttgc attgggctcg gctatgggac ggggatttgg cccggtactt taatatgggt 60

ggggtcttat gggtaggggg cttattaata taacgccccc tacccataca tattgcgtca 120

cgtaattaga agccccctac cacgccattg gcgcccgccc atagcggtac tttcggttct 180

atacaagatg gctaccgcgg ttttcgatcg ctcccggggg tcacatttct atagctggaa 240

agcatccgac ccccatgatc tgtgccttag accccagggt acgtgcctgg ataggtgggc 300

gacccctagc ggctgcttgt atttttatat cagagatcga aaatcacagc cgcccgtaac 360

agctgtcagg gctatacaag atggcgaccg ctactttcga tcgctttttc ttccctcgat 420

cctgcttccg aaacgcaacc caccccgggg gtatgtgcct tagaccctat agatgccccc 480

caggacgcag gaaaaatttt agctcccctc tataatttta ttcgagcgat cgaaatccgc 540

ggaccgcccg ggtttttact ttcgttttct cggtcgccgc tcggctcgga ttccgagcag 600

aaaaagggct agaaagctgc gctctcctgc cgaaacgcgt tgttcggatc atcccgggag 660

ggccagcgta gtctccgttg ctgggttcgg ccgagggatc gagtcgagcg ggcggcggga 720

cgccgggaac gagagaggat cgggagcggg cgcccgggtg gctcgggagc ggccgggaga 780

gggtctgcag agctccagag ctgcgtgtcc tgacactgaa cagttgggaa aaatactgga 840

tcttataatg acccagggga aggggtccga gatcctccca gtgtccgaga ctgccaagag 900

acactcctgt tgaaaagcag ctctaaaacg ttttcctgct catctctgcc agacccccgc 960

ccactgacag agctcaattg atagcagatg tcctctttgg aaggacacac gcttccacaa 1020

acaccgttcc tcactgaggt gcattgtctg ggagggaagg tcaccttctt gttcattgtg 1080

gacggtgtgc ggcccaggcc tcggacgacc ctggcccggg cttccttctt cctgatccag 1140

gtagattgac gtgcggacat cgcgaacgac cgcagtgttc ctgatctttg aatgactcga 1200

gtacatgagc gcacctttcg agactgatct ctcttgttct ccatag 1246

<210> 417
<211> 114
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 417
gtacgtgtcg gggtttgtgc ccccccttt tttttaataa aattgtatta atgttatata 60

catatctcct gtatgtgacc catgtgctta tgactctatt tctcatgtgt ttag 114

<210> 418
<211> 170
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 418
gtaagtctgt tgacatgtat gtgatgtata ctaacctgca tgggacgtgg atttacttgt 60

gtatgtcaga tagagtaaag attaactctt gcatgtgagc ggggcatcga gatagcgata 120

aatgagtcag gaggacggat acttatatgt gttgttatcc tcctctacag 170

<210> 419
<211> 122
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 419
gtgagtgtct cagttattca catcatgact cttctaacta tcttatctcc tctacctgtc 60

tctgtctttc atattcaccc acacagaaca cttgagttat acaaaccact cttatattcc 120

ag 122

<210> 420
<211> 174
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 420
gtgagtaggc atgatgttct gtgtcttgct aaccacacag tctctgcatg tgaaaagaga 60

tgataggatg agcttattaa cctcggggtg gttcatgcat gtgtcaggct gggggtggag 120

agacagctgt ggaacttagt gactcatgac agctatctct gttatcctcc acag 174

<210> 421
<211> 97

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 421
gtaagtttct gtttccattt cctctcttgt gacacatttc atgactctgc atttacataa 60

cccctgactc atggtcttcc cactcttgtt ctctcag 97

<210> 422
<211> 856
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 422
gtaagtactg cctatagata taggcgtggc tatatactat ctatagcatg ctatgcatta 60

tcttggcttt ggaccagggc gcttccgctt actcatacta tagggtgatg gtatagctta 120

acatataggt ggagctattg attgggactg ccccctattg gtgacggtgt ttcctatatc 180

tgatcaatac tatggccctc tgccatgccg cccctcttgg cctatagcca atctatcggt 240

gtcggactct gcttagaccc cctttccaac tcccagagac tgacacgcgg actctgtttg 300

tttttaagga tggctctttt attcttagac cccacaaaca ccgtccgggg ctaacagggg 360

atctccacgg cgatctcggg taccccggc cacgggagtg tggttagtct gtcctcctcc 420

ggctcctcgg gccaggtccc cagcagctct tcttgttctt catcgtcgct gggcacctct 480

cggctgctaa ttgtcgaggc cagactcagg cagatcacga tccccaccac tattaccatg 540

ccgcccaggg ccgaggctgt ggggtatgcc tctaacaacg agcccgggga ccctacatgg 600

gtccacggac tctctgctgt ctggagactt aaggccaggg aagaagagac agatgatgaa 660

gtccctgaca gctgagaaga aaaggtaagg gagctcgtta ctcccgtggt gttgtgatag 720

ttaacagcgg tggagggtag ttgtcgctca gtcgtcactg ccgccagcag agggagacat 780

aagtacacca ggctcaacca cactgtcttc atggatgttt gcaggtagag accacacgcg 840

gcacttcacc agagag 856

<210> 423
<211> 181
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 423
gtaagtctgt tgacatgtat gtgatgtata ctaacctgca tgggacgtgg atttacttgt 60

gtatgtcaga tagagtaaag attaactctt gcatgtgagc ggggcatcga gatagcgata 120

aatgagtcag gaggacggag cctctgctaa ccatgttcat gccttcttct ttttcctaca 180

g 181

<210> 424
<211> 213
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 424
gtaagtctgt tgacatgtat gtgatgtata ctaatctgca tgggacgtgg atttacttgt 60

gtatgtcaga tagagtaaag attaactctt gcatgtgagc ggggcatcga gatagcgata 120

aatgagtcag gaggacggat acttatatgt gttgttatcc tcctctacag agcctctgct 180

aaccatgttc atgccttctt ctttttccta cag 213

<210> 425
<211> 841
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 425
gtaagtaccg cctatagagt ctataggccc acccccttgg cttcttatgc atgctatact 60

gtttttggct tggggtctat acacccccgc ttcctcatgt tataggtgat ggtatagctt 120

agcctatagg tgtgggttat tgaccattat tgaccactcc cctattggtg acgatacttt 180

ccattactaa tccataacat ggctctttgc cacaactctc tttattggct atatgccaat 240

acactgtcct tcagagactg acacggactc tgtattttta caggatgggt tctcatttat 300

tatttacaaa ttcacatata caacaccacc gtccccagtg cccgcagttt ttattaaaca 360

taacgtggga tctccacgcg aatctcgggt acgtgttccg gacatgggtt cttctccggt 420

agcggcggag cttctacatc cgagccctgc tcccatgcct ccagcgactc atggtcgctc 480

ggcagctcct tgctcctaac agtggaggcc agacttaggc acagcacgat gcccaccacc 540

accagtgtgc cgcacaaggc cgtggcggta gggtatgtgt ctgaaaatga gctggggag 600

cgggcttgca ccgctgacgc atttgaaaga cttaaggcag cggcagaaga agatgcaggc 660

agctgagttg ttgtgttctg ataagagtca gaggtaactc ccgttgcggt gctgttaacg 720

gtggagggca gtgtagtctg agcagtactc gttgctgccg cgcgcgccac cagacataat 780

agctgacaga ctaacagaag cctctgctaa ccatgttcat gccttcttct ttttcctaca 840

g 841

<210> 426
<211> 850
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 426
gtaagtactg cctatagata taggcgtggc tatatactat ctatagcatg ctatgcatta 60

tcttggcttt ggaccagggc gcttccgctt actcatacta tagggtgatg gtatagctta 120

acatataggt ggagctattg attgggactg ccccctattg gtgacggtgt ttcctatatc 180

tgatcaatac tatggccctc tgccatgccg cccctcttgg cctatagcca atctatcggt 240

gtcggactct gcttagaccc cctttccaac tcccagagac tgacacgcgg actctgtttg 300

tttttaagga tggctctttt attcttagac cccacaaaca ccgtccgggg ctaacagggg 360

atctccacgg cgatctcggg taccccggc cacgggagtg tggttagtct gtcctcctcc 420

ggctcctcgg gccaggtccc cagcagctct tcttgttctt catcgtcgct gggcacctct 480

cggctgctaa ttgtcgaggc cagactcagg cagatcacga tccccaccac tattaccatg 540

ccgcccaggg ccgaggctgt ggggtatgcc tctaacaacg agcccgggga ccctacatgg 600

gtccacggac tctctgctgt ctggagactt aaggccaggg aagaagagac agatgatgaa 660

gtccctgaca gctgagaaga aaaggtaagg gagctcgtta ctcccgtggt gttgtgatag 720

ttaacagcgg tggagggcag tgtagtctga gcagtactcg ttgctgccgc gcgcgccacc 780

agacataata gctgacagac taacagaagc ctctgctaac catgttcatg ccttcttctt 840

tttcctacag 850

<210> 427
<211> 181
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 427
gtaagtctgt tgacatgtat gtgatgtata ctaacctgca tgggacgtgg atttacttgt 60

gtatgtcaga tagagtaaag attaactctt gcatgtgagc ggggcatcga gatagcgata 120

aatgagtcag gaggacggag cctctgctaa ccatgttcat gccttcttct ttttcctaca 180

g 181

<210> 428
<211> 213
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 428
gtaagtctgt tgacatgtat gtgatgtata ctaatctgca tgggacgtgg atttacttgt 60

gtatgtcaga tagagtaaag attaactctt gcatgtgagc ggggcatcga gatagcgata 120

aatgagtcag gaggacggat acttatatgt gttgttatcc tcctctacag agcctctgct 180

aaccatgttc atgccttctt ctttttccta cag 213

<210> 429
<211> 841
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 429
gtaagtaccg cctatagagt ctataggccc acccccttgg cttcttatgc atgctatact 60

gtttttggct tggggtctat acacccccgc ttcctcatgt tataggtgat ggtatagctt 120

agcctatagg tgtgggttat tgaccattat tgaccactcc cctattggtg acgatacttt 180

ccattactaa tccataacat ggctctttgc cacaactctc tttattggct atatgccaat 240

acactgtcct tcagagactg acacggactc tgtattttta caggatgggt tctcatttat 300

tatttacaaa ttcacatata caacaccacc gtccccagtg cccgcagttt ttattaaaca 360

taacgtggga tctccacgcg aatctcgggt acgtgttccg gacatgggtt cttctccggt 420

agcggcggag cttctacatc cgagccctgc tcccatgcct ccagcgactc atggtcgctc 480

ggcagctcct tgctcctaac agtggaggcc agacttaggc acagcacgat gcccaccacc 540

accagtgtgc cgcacaaggc cgtggcggta gggtatgtgt ctgaaaatga gctcggggag 600

cgggcttgca ccgctgacgc atttgaaaga cttaaggcag cggcagaaga agatgcaggc 660

agctgagttg ttgtgttctg ataagagtca gaggtaactc ccgttgcggt gctgttaacg 720

gtggagggca gtgtagtctg agcagtactc gttgctgccg cgcgcgccac cagacataat 780

agctgacaga ctaacagaag cctctgctaa ccatgttcat gccttcttct ttttcctaca 840

g 841

<210> 430
<211> 850
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 430
gtaagtactg cctatagata taggcgtggc tatatactat ctatagcatg ctatgcatta 60

tcttggcttt ggaccagggc gcttccgctt actcatacta tagggtgatg gtatagctta 120

acatataggt ggagctattg attgggactg ccccctattg gtgacggtgt ttcctatatc 180

tgatcaatac tatggccctc tgccatgccg cccctcttgg cctatagcca atctatcggt 240

gtcggactct gcttagaccc cctttccaac tcccagagac tgacacgcgg actctgtttg 300

tttttaagga tggctctttt attcttagac cccacaaaca ccgtccgggg ctaacagggg 360

atctccacgg cgatctcggg taccccggc cacgggagtg tggttagtct gtcctcctcc 420

ggctcctcgg gccaggtccc cagcagctct tcttgttctt catcgtcgct gggcacctct 480

cggctgctaa ttgtcgaggc cagactcagg cagatcacga tccccaccac tattaccatg 540

ccgcccaggg ccgaggctgt ggggtatgcc tctaacaacg agcccgggga ccctacatgg 600

gtccacggac tctctgctgt ctggagactt aaggccaggg aagaagagac agatgatgaa 660

gtccctgaca gctgagaaga aaaggtaagg gagctcgtta ctcccgtggt gttgtgatag 720

ttaacagcgg tggagggcag tgtagtctga gcagtactcg ttgctgccgc gcgcgccacc 780

agacataata gctgacagac taacagaagc ctctgctaac catgttcatg ccttcttctt 840

tttcctacag 850

<210> 431
<211> 1133
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 431
gtaagtgccg tgtgtggttc ccgcgggcct ggcctcttta cgggttatgg cccttgcgtg 60

ccttgaatta cttccacctg gctccagtac gtgattcttg atcccgagct ggagccaggg 120

gcgggccttg cgctttagga gcccccttcgc ctcgtgcttg agttgaggcc tggcctgggc 180

gctggggccg ccgcgtgcga atctggtggc accttcgcgc ctgtctcgct gctttcgata 240

agtctctagc catttaaaat ttttgatgac gtgctgcgac gctttttttc tggcaagata 300

gtcttgtaaa tgcgggccag gatctgcaca ctggtatttc ggtttttggg cccgcggccg 360

gcgacggggc ccgtgcgtcc cagcgcacat gttcggcgag gcggggcctg cgagcgcggc 420

caccgagaat cggacggggg tagtctcaag ctggccggcc tgctctggtg cctggcctcg 480

cgccgccgtg tatcgccccg ccctgggcgg caaggctggc ccggtcggca ccagttgcgt 540

gagcggaaag atggccgctt cccggccctg ctccaggggg ctcaaaatgg aggacgcggc 600

gctcgggaga gcgggcgggt gagtcaccca cacaaaggaa aagggccttt ccgtcctcag 660

ccgtcgcttc atgtgactcc acggagtacc gggcgccgtc caggcacctc gattagttct 720

ggagcttttg gagtacgtcg tctttaggtt gggggggaggg gttttatgcg atggagtttc 780

cccacactga gtgggtggag actgaagtta ggccagcttg gcacttgatg taattctcct 840

tggaatttgg ccttttgag tttggatctt ggttcattct caagcctcag acagtggttc 900

aaagtttttt tcttccattt caggtgtcgt gaacacgtct caggggcgag accggtgagg 960

tgtggcaggc ttgagatcca gctgttgggg tgagtactcc ctctcaaaag cgggcattac 1020

ttctgcgcta agattgtcag tttccaaaaa cgaggaggat ttgatattca cctggcccga 1080

tctggccata cacttgagtg acaatgacat ccactttgcc tttctctcca cag 1133

<210> 432
<211> 943
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 432
gtgagtggcg ggtgtggcct ccgcgggccc gggctccctc ctttgagcgg ggtcggaccg 60

ccgtgcgggt gtcgtcggcc gggcttctct gcgagcgttc ccgccctgga tggcgggctg 120

tgcgggaggg cgagggggggg aggcctggcg gcggccccgg agcctcgcct cgtgtcgggc 180

gtgaggccta gcgtggcttc cgccccgccg cgtgccaccg cggccgcgct ttgctgtctg 240

cccggctgcc ctcgattgcc tgcccgcggc ccgggccaac aaagggaggg cgtggagctg 300

gctggtaggg agccccgtag tccgcatgtc gggcagggag agcggcagca gtcgggggggg 360

ggaccgggcc cgcccgtccc gcagcacatg tccgacgccg cctggacggg tagcggcctg 420

tgtcctgata aggcggccgg gcggtgggtt ttagatgccg ggttcaggtg gccccgggtc 480

ccggcccggt ctggccagta ccccgtagtg gcttagctcc gaggagggcg agcccgcccg 540

cccggcacca gttgcgtgcg cggaaagatg gccgctcccg ggccctgtag caaggagctc 600

aaaatggagg acgcggcagc ccggcggagc ggggcgggtg agtcacccac acaaaggaag 660

agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtgtacc ggccgcactt 720

cagtcacccc gggcgctctt tcggagcacc gctggcctcc gctgggggag gggatctgtc 780

taatggcgtt ggagtttgct cacatttggt gggtggagac tgtagccagg ccagcctggc 840

catggaagta attcttggaa tttgcccatt ttgagtttgg agcgaagctg attgacaaag 900

ctgcttagcc gttcaaaggt attcttcgaa ctttttttt aag 943

<210> 433
<211> 923
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 433
gtaagtgccg tgtgtggttc ccgcgggcct ggcctcttta cgggttatgg cccttgcgtg 60

ccttgaatta cttccacctg gctccagtac gtgattcttg atcccgagct ggagccaggg 120

gcgggccttg cgctttagga gcccttcgc ctcgtgcttg agttgaggcc tggcctgggc 180

gctggggccg ccgcgtgcga atctggtggc accttcgcgc ctgtctcgct gctttcgata 240

agtctctagc catttaaaat ttttgatgac gtgctgcgac gctttttttc tggcaagata 300

gtcttgtaaa tgcgggccag gatctgcaca ctggtatttc ggtttttggg cccgcggccg 360

gcgacggggc ccgtgcgtcc cagcgcacat gttcggcgag gcggggcctg cgagcgcggc 420

caccgagaat cggacggggg tagtctcaag ctggccggcc tgctctggtg cctggcctcg 480

cgccgccgtg tatcgccccg ccctgggcgg caaggctggc ccggtcggca ccagttgcgt 540

gagcggaaag atggccgctt cccggccctg ctccaggggg ctcaaaatgg aggacgcggc 600

gctcgggaga gcgggcgggt gagtcaccca cacaaaggaa aagggccttt ccgtcctcag 660

ccgtcgcttc atgtgactcc acggagtacc gggcgccgtc caggcacctc gattagttct 720

ggagcttttg gagtacgtcg tctttaggtt gggggggaggg gttttatgcg atggagtttc 780

cccacactga gtgggtggag actgaagtta ggccagcttg gcacttgatg taattctcct 840

tggaatttgg ccttttgag tttggatctt ggttcattct caagcctcag acagtggttc 900

aaagtttttt tcttccattt cag 923

<210> 434
<211> 943
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 434
gtaagtgccg tgtgtggttc ccgcgggcct ggcctcttta cgggttatgg cccttgcgtg 60

ccttgaatta cttccacgcc cctggctgca gtacgtgatt cttgatcccg agcttcgggt 120

tggaagtggg tgggagagtt cgaggccttg cgcttaagga gccccttcgc ctcgtgcttg 180

agttgaggcc tggcctgggc gctggggccg ccgcgtgcga atctggtggc accttcgcgc 240

ctgtctcgct gctttcgata agtctctagc catttaaaat ttttgatgac ctgctgcgac 300

gctttttttc tggcaagata gtcttgtaaa tgcgggccaa gatctgcaca ctggtatttc 360

ggtttttggg gccgcgggcg gcgacggggc ccgtgcgtcc cagcgcacat gttcggcgag 420

gcggggcctg cgagcgcggc caccgagaat cggacggggg tagtctcaag ctggccggcc 480

tgctctggtg cctggcctcg cgccgccgtg tatcgccccg ccctgggcgg caaggctggc 540

ccggtcggca ccagttgcgt gagcggaaag atggccgctt cccggccctg ctgcagggag 600

ctcaaaatgg aggacgcggc gctcgggaga gcgggcgggt gagtcaccca cacaaaggaa 660

aagggccttt ccgtcctcag ccgtcgcttc atgtgactcc acggagtacc gggcgccgtc 720

caggcacctc gattagttct cgagcttttg gagtacgtcg tctttaggtt gggggggaggg 780

gttttatgcg atggagtttc cccacactga gtgggtggag actgaagtta ggccagcttg 840

gcacttgatg taattctcct tggaatttgc ccttttgag tttggatctt ggttcattct 900

caagcctcag acagtggttc aaagtttttt tcttccattt cag 943

<210> 435
<211> 943
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 435
gtaagtgccg tgtgtggttc ccgcgggcct ggcctcttta cgggttatgg cccttgcgtg 60

ccttgaatta cttccacgcc cctggctgca gtacgtgatt cttgatcccg agcttcgggt 120

tggaagtggg tgggagagtt cgaggccttg cgcttaagga gccccttcgc ctcgtgcttg 180

agttgaggcc tggcctgggc gctggggccg ccgcgtgcga atctggtggc accttcgcgc 240

ctgtctcgct gctttcgata agtctctagc catttaaaat ttttgatgac gtgctgcgac 300

gctttttttc tggcaagata gtcttgtaaa tgcgggccag gatctgcaca ctggtatttc 360

ggtttttggg cccgcggccg gcgacggggc ccgtgcgtcc cagcgcacat gttcggcgag 420

gcggggcctg cgagcgcggc caccgagaat cggacggggg tagtctcaag ctggccggcc 480

tgctctggtg cctggcctcg cgccgccgtg tatcgccccg ccctgggcgg caaggctggc 540

ccggtcggca ccagttgcgt gagcggaaag atggccgctt cccggccctg ctccaggggg 600

ctcaaaatgg aggacgcggc gctcgggaga gcgggcgggt gagtcaccca cacaaaggaa 660

aagggccttt ccgtcctcag ccgtcgcttc atgtgactcc acggagtacc gggcgccgtc 720

caggcacctc gattagttct ggagcttttg gagtacgtcg tctttaggtt gggggggaggg 780

gttttatgcg atggagtttc cccacactga gtgggtggag actgaagtta ggccagcttg 840

gcacttgatg taattctcct tggaatttgg ccttttgag tttggatctt ggttcattct 900

caagcctcag acagtggttc aaagtttttt tcttccattt cag 943

<210> 436
<211> 938
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 436
gtaagtgccg tgtgtggttc ccgcgggcct ggcctcttta cgggttatgg cccttgcgtg 60

ccttgaatta cttccactgg ctgcagtacg tgattcttga tcccgagctt cgggttggaa 120

gtgggtggga gagttcgagg ccttgcgctt aaggagcccc ttcgcctcgt gcttgagttg 180

aggcctggcc tgggcgctgg ggccgccgcg tgcgaatctg gtggcacctt cgcgcctgtc 240

tcgctgcttt cgataagtct ctagccattt aaaatttttg atgacctgct gcgacgcttt 300

ttttctggca agatagtctt gtaaatgcgg gccaagatct gcacactggt atttcggttt 360

ttggggccgc gggcggcgac ggggcccgtg cgtcccagcg cacatgttcg gcgaggcggg 420

gcctgcgagc gcggccaccg agaatcggac gggggtagtc tcaagctggc cggcctgctc 480

tggtgcctgg cctcgcgccg ccgtgtatcg ccccgccctg ggcggcaagg ctggcccggt 540

cggcaccagt tgcgtgagcg gaaagatggc cgcttcccgg ccctgctgca gggagctcaa 600

aatggaggac gcggcgctcg ggagagcggg cgggtgagtc acccacacaa aggaaaaggg 660

cctttccgtc ctcagccgtc gcttcatgtg actccacgga gtaccgggcg ccgtccaggc 720

acctcgatta gttctcgagc ttttggagta cgtcgtcttt aggttggggg gaggggtttt 780

atgcgatgga gtttccccac actgagtggg tggagactga agttaggcca gcttggcact 840

tgatgtaatt ctccttggaa tttgcccttt ttgagtttgg atcttggttc attctcaagc 900

ctcagacagt ggttcaaagt ttttttcttc catttcag 938

<210> 437
<211> 948
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 437
gtgaggggcg ggtgtggctt ccgcgggccg ccgagctgga ggtcctgctc cgagcgggcc 60

gggccccgct gtcgtcggcg gggattagct gcgagcattc ccgcttcgag ttgcgggcgg 120

cgcgggaggc agagtgcgag gcctagcggc aaccccgtag cctcgcctcg tgtccggctt 180

gaggcctagc gtggtgtccg cgccgccgcc gcgtgctact ccggccgcac tctggtcttt 240

tttttttttg ttgttgttgc cctgctgcct tcgattgccg ttcagcaata ggggctaaca 300

aagggagggt gcggggcttg ctcgcccgga gcccggagag gtcatggttg gggaggaatg 360

gagggacagg agtggcggct ggggcccgcc cgccttcgga gcacatgtcc gacgccacct 420

ggatggggcg aggcctgggg tttttcccga agcaaccagg ctggggttag cgtgccgagg 480

ccatgtggcc ccagcacccg gcacgatctg gcttggcggc gccgcgttgc cctgcctccc 540

taactagggt gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga tggccgctcc 600

cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt 660

gagtcaccca cacaaaggaa gagggcctgg tccctcaccg gctgctgctt cctgtgaccc 720

cgtggtccta tcggccgcaa tagtcacctc gggcttttga gcacggctag tcgcggcggg 780

gggaggggat gtaatggcgt tggagtttgt tcacatttgg tgggtggaga ctagtcaggc 840

cagcctggcg ctggaagtca tttttggaat ttgtcccctt gagttttgag cggagctaat 900

tctcgggctt cttagcggtt caaaggtatc ttttaaaccc ttttttag 948

<210> 438
<211> 944
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 438
gtgagtggcg ggtgtggctt ccgcgggccc cggagctgga gccctgctct gagcgggccg 60

ggctgatatg cgagtgtcgt ccgcagggtt tagctgtgag cattcccact tcgagtggcg 120

ggcggtgcgg gggtgagagt gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc 180

ggcttgaggc ctagcgtggt gtccgccgcc gcgtgccact ccggccgcac tatgcgtttt 240

ttgtccttgc tgccctcgat tgccttccag cagcatgggc taacaaaggg agggtgtggg 300

gctcactctt aaggagccca tgaagcttac gttggatagg aatggaaggg caggaggggc 360

gactggggcc cgcccgcctt cggagcacat gtccgacgcc acctggatgg ggcgaggcct 420

gtggctttcc gaagcaatcg ggcgtgagtt tagcctacct gggccatgtg gccctagcac 480

tgggcacggt ctggcctggc ggtgccgcgt tcccttgcct cccaacaagg gtgaggccgt 540

cccgcccggc accagttgct tgcgcggaaa gatggccgct cccggggccc tgttgcaagg 600

agctcaaaat ggaggacgcg gcagcccggt ggagcgggcg ggtgagtcac ccacacaaag 660

gaagagggcc ttgcccctcg ccggccgctg cttcctgtga ccccgtggtc tatcggccgc 720

atagtcacct cgggcttctc ttgagcaccg ctcgtcgcgg cgggggggagg ggatctaatg 780

gcgttggagt ttgttcacat ttggtgggtg gagactagtc aggccagcct ggcgctggaa 840

gtcattcttg gaatttgccc ctttgagttt ggagcgaggc taattctcaa gcctcttagc 900

ggttcaaagg tattttctaa acccgtttcc aggtgttgtg aaag 944

<210> 439
<211> 994
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 439
gtgagtttcg ggtgtggctt ccgcgggcct ggccgccttg ccttgagcgg attgaggcct 60

tcgcacgcct ttctgtccag tcgtgctgct gggtcatttt tttcgaggtt cttggccccg 120

aatttcgggt tgcgaggggt gggagagttc gaggcctagc gtttttttcg gaagcggctt 180

cgcctcgtgc ttgtgttgag gcctggtctg ggctcccggg ccgtcgcgtg cgaatcccgt 240

cgtacatttg cgccctcccc actgcctttt ctttttttcc cttctctttt ttttttttta 300

caattgggtg tcgccggctc gttgaacccc caactagcag ccgtgattcg atgccttttt 360

ccgccgtgcg tggacgggga accacacgcc cgtcggctcg cgcggggcgg cggcggctgg 420

gcccgcccgt cccggcgcac atgttctgcg cggcctcggg gaggcgaggc ggggcccggg 480

agccccggcc gccagtccgg gccggcgtgg gcttcgagta gcgggccgag cgacacagct 540

gtccggcctg ctttgagcac ccatggccgt ggctcccggc ttggcccggc ccgcccggca 600

ccagttgcgt gcgcggaaag atggccgctc ccgggcccag ttacagggag ctcaaaatgg 660

aggacgcggc gggccgggag agcgggcggg tgagtcaccc acacaaagga aaagggattt 720

tccctcttcg gtcgctgttt cctgtgaccc tgcagtgctc gggcgccgtc ccggcacctc 780

gatgtcgcct tggaggctcg gcgccctcct gccgggggag gggatttggt cccccggagt 840

ttcctctctt ggtgggtgga gactggtgtg tgaggccagc ttggcactgg ttgtaattct 900

ccttggaatt tgccctttg agttgggacc gtggcttatt ctcaagcctc tggatggtgg 960

ttcacacaaa ggtatttttg aacttccttt ttag 994

<210> 440
<211> 849
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 440
gtgggtgctg ggtgttgctt ccgtaggcct ggcccgggcc gggagctggc ggtgggcctg 60

ccgggcctct ctcccgggca gcgcctccag ctgccgtgcg ggcctcggcc ccgagcccga 120

ggggcgcggc ctttgccttt ccagaagcct cggcctcgtg ttctggggcg aggcctggct 180

tggcgtccgg agcgccgcgt gccggttcgg gcgcgctgtg gcggctgcct gctgcctggg 240

tatcgagtcc aggccttttg ggataacaaa ggagccccgg gtggtagtcg cccgcggagc 300

ggagccgctc tctatggcag gacctccgcc cccggaccgg gcgggcccgc gcacaagcct 360

cgtgtcgctt gagcgagggg aggccttggt ccgtcgccgg gtcggtgggg gcagtttggt 420

ggcccggcgt cccgtccaac ccggggcatc ccctagttcc gcttcgggcg gccttggccg 480

ctcggcacca gttgcgtgcg cggaaagatg gccgctacgg gcctgctccg ggagctcaaa 540

atggaggacg cggcggccgg gcggtgagtc acccacacaa agagtcgggg ccttccccgc 600

cggccgccgc gtcctgtgac ccccgcggcg ctctgcccgc cattggtcac ctgggttact 660

ctatgtcgcg gtgggggagg ggaggcaggc agtgcgttgg agtttgctcg cactcggtgg 720

gtggagtcga agtcaggcca gcgtggcctc gcatgtcagt cttggagttt gcccctctcg 780

gtctggttcg tgacttactt ggctcttaca gcggttctca gacaattttt tttccacttg 840

ttgccttag 849

<210> 441
<211> 956
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 441
gtgagtgccg ggcgtggctt ccgcgggcct ggcctcccgg agcgggctgc ggccctcgcg 60

tgcctttctc tgctgctgcg ccacggagtc cctttgcgat gttcttgacc ccgaatttcg 120

ggtcgtaagt gggtgggaga gttcgaggcc ttgcgctttt ttcaggggcc ccgtcgcctc 180

gtgcttgggt gaaggcctgg ttggcgcgcc gtggctgccg cgtgcgattc ccgccgccgc 240

gccgcctcgc cggccctgtg atccagaagt ctccggccac ttgagttctc ggggaaagta 300

tccccagtgg ttttgcgtcg agggggtctg accgaggttg gtcagcgccg acggggcggg 360

cttcgctcgc gtcgcgggct cgggctgtgg ggcggcggcg ggccctccgc ccggcgcaca 420

tggcctgcga ggcggtgccc gcgagcctcg gccccgagtc gacgcgggag gaggcccgtg 480

gaggggccag gcggctccgg cgccgggctc gcgccgccgt gcgcctccct gccctgggcg 540

gcgaggccgg cctttgcccg ctcggcacca gttgcgtgcg cggaaagatg gccgctcgcg 600

gccctgtgca gggagctcaa aatggaggac gcggcggccc gggagagcgg gcgggtgagt 660

cacccgcaca aagggaaagg cttttccctc cacggccgct gcttcctgtg accccgccgt 720

gtgcccggca ccgtcccggc tcctcggttt catggccttt ggagcagggc ttcctctggt 780

tgggggaggg gacttaggcg atggagtttc cccacacttg gtgggtggag acaagagttg 840

ggccagcttg gcactggatg attctccttg gaatttgccc tttgagtttt catcgtggct 900

tgttctcaag cttgtgggac ggtggttaaa agatctcccc ccctcccct ctttag 956

<210> 442
<211> 937
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 442
gtgagtggcg ggtgtggcct ccgcgggccc gggctccctc ctttgagcgg ggtcggaccg 60

ccgtgcgggt gtcgtcggcc gggcttctct gcgagcgttc ccgccctgga tggcgggctg 120

tgcgggaggg cgagggggg aggcctggcg gcggccccgg agcctcgcct cgtgtcgggc 180

gtgaggccta gcgtggcttc cgccccgccg cgtgccaccg cggccgcgct ttgctgtctg 240

cccggctgcc ctcgattgcc tgcccgcggc ccgggccaac aaagggaggg cgtggagctg 300

gctggtaggg agccccgtag tccgcatgtc gggcagggag agcggcagca gtcgggggg 360

ggaccgggcc cgcccgtccc gcagcacatg tccgacgccg cctggacggg tagcggcctg 420

tgtcctgata aggcggccgg gcggtgggtt ttagatgccg ggttcaggtg gccccgggtc 480

ccggcccggt ctggccagta ccccgtagtg gcttagctcc gaggagggcg agcccgcccg 540

cccggcacca gttgcgtgcg cggaaagatg gccgctcccg ggccctgtag caaggagctc 600

aaaatggagg acgcggcagc ccggcggagc ggggcgggtg agtcacccac acaaaggaag 660

agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtgtacc ggccgcactt 720

cagtcacccc gggcgctctt tcggagcacc gctggcctcc gctgggggag gggatctgtc 780

taatggcgtt ggagtttgct cacatttggt gggtggagac tgtagccagg ccagcctggc 840

catggaagta attcttggaa tttgcccatt ttgagtttgg agcgaagctg attgacaaag 900

ctgcttagcc gttcaaagtt tttttcttcc atttcag 937

<210> 443
<211> 943
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 443
gtgaggggcg ggtgtggctt ccgcgggccg ccgagctgga ggtcctgctc cgagcgggcc 60

gggccccgct gtcgtcggcg gggattagct gcgagcattc ccgcttcgag ttgcgggcgg 120

cgcgggaggc agagtgcgag gcctagcggc aaccccgtag cctcgcctcg tgtccggctt 180

gaggcctagc gtggtgtccg cgccgccgcc gcgtgctact ccggccgcac tctggtcttt 240

ttttttttgt tgttgttgcc ctgctgcctt cgattgccgt tcagcaatag gggctaacaa 300

agggagggtg cggggcttgc tcgcccggag cccggagagg tcatggttgg ggaggaatgg 360

agggacagga gtggcggctg gggcccgccc gccttcggag cacatgtccg acgccacctg 420

gatggggcga ggcctggggt ttttcccgaa gcaaccaggc tggggttagc gtgccgaggc 480

catgtggccc cagcacccgg cacgatctgg cttggcggcg ccgcgttgcc ctgcctccct 540

aactagggtg aggccatccc gtccggcacc agttgcgtgc gtggaaagat ggccgctccc 600

gggccctgtt gcaaggagct caaaatggag gacgcggcag cccggtggag cgggcgggtg 660

agtcacccac acaaaggaag agggcctggt ccctcaccgg ctgctgcttc ctgtgacccc 720

gtggtcctat cggccgcaat agtcacctcg ggcttttgag cacggctagt cgcggcgggg 780

ggaggggatg taatggcgtt ggagtttgtt cacatttggt gggtggagac tagtcaggcc 840

agcctggcgc tggaagtcat ttttggaatt tgtccccttg agttttgagc ggagctaatt 900

ctcgggcttc ttagcggttc aaagtttttt tcttccattt cag 943

<210> 444
<211> 928
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 444
gtgagtggcg ggtgtggctt ccgcgggccc cggagctgga gccctgctct gagcgggccg 60

ggctgatatg cgagtgtcgt ccgcagggtt tagctgtgag cattcccact tcgagtggcg 120

ggcggtgcgg gggtgagagt gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc 180

ggcttgaggc ctagcgtggt gtccgccgcc gcgtgccact ccggccgcac tatgcgtttt 240

ttgtccttgc tgccctcgat tgccttccag cagcatgggc taacaaaggg agggtgtggg 300

gctcactctt aaggagccca tgaagcttac gttggatagg aatggaaggg caggaggggc 360

gactggggcc cgcccgcctt cggagcacat gtccgacgcc acctggatgg ggcgaggcct 420

gtggctttcc gaagcaatcg ggcgtgagtt tagcctacct gggccatgtg gccctagcac 480

tgggcacggt ctggcctggc ggtgccgcgt tcccttgcct cccaacaagg gtgaggccgt 540

cccgcccggc accagttgct tgcgcggaaa gatggccgct cccggggccc tgttgcaagg 600

agctcaaaat ggaggacgcg gcagcccggt ggagcgggcg ggtgagtcac ccacacaaag 660

gaagagggcc ttgcccctcg ccggccgctg cttcctgtga ccccgtggtc tatcggccgc 720

atagtcacct cgggcttctc ttgagcaccg ctcgtcgcgg cgggggggagg ggatctaatg 780

gcgttggagt ttgttcacat ttggtgggtg gagactagtc aggccagcct ggcgctggaa 840

gtcattcttg gaatttgccc ctttgagttt ggagcgaggc taattctcaa gcctcttagc 900

ggttcaaagt ttttttcttc catttcag 928

<210> 445
<211> 971
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 445
gtcgctgcgc gctgccttcg ccccgtgccc cgctccgccg ccgcctcgcg ccgcccgccc 60

cggctctgac tgaccgcgtt actcccacag gtgagcgggc gggacggccc ttctcctccg 120

ggctgtaatt agcgcttggt ttaatgacgg cttgtttctt ttctgtggct gcgtgaaagc 180

cttgaggggc tccgggaggg ccctttgtgc gggggggagcg gctcgggggg tgcgtgcgtg 240

tgtgtgtgcg tggggagcgc cgcgtgcggc tccgcgctgc ccggcggctg tgagcgctgc 300

gggcgcggcg cggggctttg tgcgctccgc agtgtgcgcg aggggagcgc ggccgggggc 360

ggtgccccgc ggtgcggggg gggctgcgag gggaacaaag gctgcgtgcg gggtgtgtgc 420

gtgggggggt gagcaggggg tgtgggcgcg tcggtcgggc tgcaaccccc cctgcacccc 480

cctccccgag ttgctgagca cggcccggct tcgggtgcgg ggctccgtac ggggcgtggc 540

gcggggctcg ccgtgccggg cgggggggtgg cggcaggtgg gggtgccggg cggggcgggg 600

ccgcctcggg ccggggaggg ctcgggggag gggcgcggcg gcccccggag cgccggcggc 660

tgtcgaggcg cggcgagccg cagccattgc cttttatggt aatcgtgcga gagggcgcag 720

ggacttcctt tgtcccaaat ctgtgcggag ccgaaatctg ggaggcgccg ccgcaccccc 780

tctagcgggc gcggggcgaa gcggtgcggc gccggcagga aggaaatggg cggggagggc 840

cttcgtgcgt cgccgcgccg ccgtcccctt ctccctctcc agcctcgggg ctgtccgcgg 900

ggggacggct gccttcgggg gggacggggc agggcggggt tcggcttctg gcgtgtgacc 960

ggcggctcta g 971

<210> 446
<211> 971
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 446
gtcgctgcgc gctgccttcg ccccgtgccc cgctccgccg ccgcctcgcg ccgcccgccc 60

cggctctgac tgaccgcgtt actcccacag gtgagcgggc gggacggccc ttctcctccg 120

ggctgtaatt agcgcttggt ttaatgacgg cttgtttctt ttctgtggct gcgtgaaagc 180

cttgaggggc tccgggaggg ccctttgtgc gggggggagcg gctcgggggg tgcgtgcgtg 240

tgtgtgtgcg tggggagcgc cgcgtgcggc tccgcgctgc ccggcggctg tgagcgctgc 300

gggcgcggcg cggggctttg tgcgctccgc agtgtgcgcg aggggagcgc ggccgggggc 360

ggtgccccgc ggtgcggggg gggctgcgag gggaacaaag gctgcgtgcg gggtgtgtgc 420

gtgggggggt gagcaggggg tgtgggcgcg tcggtcgggc tgcaaccccc cctgcacccc 480

cctccccgag ttgctgagca cggcccggct tcgggtgcgg ggctccgtac ggggcgtggc 540

gcggggctcg ccgtgccggg cgggggggtgg cggcaggtgg gggtgccggg cggggcgggg 600

ccgcctcggg ccggggaggg ctcgggggag gggcgcggcg gcccccggag cgccggcggc 660

tgtcgaggcg cggcgagccg cagccattgc cttttatggt aatcgtgcga gagggcgcag 720

ggacttcctt tgtcccaaat ctgtgcggag ccgaaatctg ggaggcgccg ccgcaccccc 780

tctagcgggc gcggggcgaa gcggtgcggc gccggcagga aggaaatggg cggggagggc 840

cttcgtgcgt cgccgcgccg ccgtcccctt ctccctctcc agcctcgggg ctgtccgcgg 900

ggggacggct gccttcgggg gggacggggc agggcggggt tcggcttctg gcgtgtgacc 960

ggcggctcta g 971

<210> 447
<211> 963
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 447
gtcgctgcgt tgccttcgcc ccgtgccccg ctccgcgccg cctcgcgccg cccgccccgg 60

ctctgactga ccgcgttact cccacaggtg agcgggcggg acggcccttc tcctccgggc 120

tgtaattagc gcttggttta atgacggctc gtttcttttc tgtggctgcg tgaaagcctt 180

aaagggctcc gggagggccc tttgtgcggg ggggagcggc tcgggggggtg cgtgcgtgtg 240

tgtgtgcgtg gggagcgccg cgtgcggccc gcgctgcccg gcggctgtga gcgctgcggg 300

cgcggcgcgg ggctttgtgc gctccgcgtg tgcgcgaggg gagcgcggcc gggggcggtg 360

ccccgcggtg cgggggggct gcgaggggaa caaaggctgc gtgcggggtg tgtgcgtggg 420

ggggtgagca gggggtgtgg gcgcggcggt cgggctgtaa ccccccccctg caccccccctc 480

cccgagttgc tgagcacggc ccggcttcgg gtgcggggct ccgtgcgggg cgtggcgcgg 540

ggctcgccgt gccgggcggg gggtggcggc aggtgggggt gccgggcggg gcggggccgc 600

ctcgggccgg ggagggctcg ggggaggggc gcggcggccc cggagcgccg gcggctgtcg 660

aggcgcggcg agccgcagcc attgcctttt atggtaatcg tgcgagaggg cgcagggact 720

tcctttgtcc caaatctggc ggagccgaaa tctgggaggc gccgccgcac cccctctagc 780

gggcgcgggc gaagcggtgc ggcgccggca ggaaggaaat gggcggggag ggccttcgtg 840

cgtcgccgcg ccgccgtccc cttctccatc tccagcctcg gggctgccgc agggggacgg 900

ctgccttcgg gggggacggg gcagggcggg gttcggcttc tggcgtgtga ccggcggctc 960

tag 963

<210> 448
<211> 971
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 448
gtcgctgcgc gctgccttcg ccccgtgccc cgctccgccg ccgcctcgcg ccgcccgccc 60

cggctctgac tgaccgcgtt actcccacag gtgagcgggc gggacggccc ttctcctccg 120

ggctgtaatt agcgcttggt ttaatgacgg cttgtttctt ttctgtggct gcgtgaaagc 180

cttgaggggc tccgggaggg ccctttgtgc gggggggagcg gctcgggggg tgcgtgcgtg 240

tgtgtgtgcg tggggagcgc cgcgtgcggc tccgcgctgc ccggcggctg tgagcgctgc 300

gggcgcggcg cggggctttg tgcgctccgc agtgtgcgcg aggggagcgc ggccgggggc 360

ggtgccccgc ggtgcggggg gggctgcgag gggaacaaag gctgcgtgcg gggtgtgtgc 420

gtgggggggt gagcaggggg tgtgggcgcg tcggtcgggc tgcaaccccc cctgcacccc 480

cctccccgag ttgctgagca cggcccggct tcgggtgcgg ggctccgtac ggggcgtggc 540

gcggggctcg ccgtgccggg cgggggggtgg cgccaggtgg gggtgccggg cggggcgggg 600

ccgcctcggg ccggggaggg ctcgggggag gggcgcggcg gcccccggag cgccggcggc 660

tgtcgaggcg cggcgagccg cagccattgc cttttatggt aatcgtgcga gagggcgcag 720

ggacttcctt tgtcccaaat ctgtgcggag ccgaaatctg ggaggcgccg ccgcaccccc 780

tctagcgggc gcggggcgaa gcggtgcggc gccggcagga aggaaatggg cggggagggc 840

cttcgtgcgt cgccgcgccg ccgtcccctt ctccctctcc agcctcgggg ctgtccgcgg 900

ggggacggct gccttcgggg gggacggggc agggcggggt tcggcttctg gcgtgtgacc 960

ggcggctcta g 971

<210> 449
<211> 956
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 449
gtaagcaggg acaacaggcc cagccggcca cagccctccc gtgggcagtg accgcgctgc 60

agggtcgcgg gggacactcg gcgcggacac cggggaaggc tggagggtgg tgccgggccg 120

cggagcggac actttcagat ccaactttca gtccagggtg tagacccttt acagccgcat 180

tgccacggtg tagacaccgg tggacccgct ctggctcaga gcacgcggct tgggggaacc 240

cattagggtc gcagtgtggg cgctatgaga gccgatgcag ctttcgggtg ttgaaccgta 300

tctgcccacc ttgggggggag gacacaaggt cgggagccaa acgccacgat catgccttgg 360

tggcccatgg gtctttgtct aaaccggttt gcccatttgg cttgccgggc gggcgggcgc 420

ggcgggcccg gctcggccgg gtgggggctg ggttgccact gcgcttgcgc gctctatggc 480

tgggtattgg ggcgcgtgca cgctggggag ggagcccttc ctcttccccc tctcccaagt 540

taaacttgcg cgtgcgtatt gagacttgga gcgcggccac cggggttggg cgagggcggg 600

gccgttgtcc ggaaggggcg gggtcgcaga ggattcgggg cgcctgctcg cgcttcctgc 660

tgggtgtggt cgcctcccgc gcgcgcacta gaccgcccgg cgggggggcg aaggcgggtc 720

ttgcgcccgt ttggggaggg ggcggagacc tggcttcctg ccgtggggcc gcctccggac 780

cagcgtttgc ctcttatggt aataacgcgg ccggcctggg cttcatttgt cccctgagtt 840

tgggcgcgcg ccccctggcg gcccgagacc gcggcttgcc ggaagtgggc agggcggcaa 900

cggctgcgcc tagtggcccg ccagtgaccg cgaccctctt ttgtgccctg atatag 956

<210> 450
<211> 956
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 450
gtaagcaggg acaacaggcc cagccggcca cagccctccc gtgggcagtg accgcgctgc 60

agggtcgcgg gggacactcg gcgcggacac cggggaaggc tggagggtgg tgccgggccg 120

cggagcggac actttcagat ccaactttca gtccagggtg tagacccttt acagccgcat 180

tgccacggtg tagacaccgg tggacccgct ctggctcaga gcacgcggct tgggggaacc 240

cattagggtc gcagtgtggg cgctatgaga gccgatgcag ctttcgggtg ttgaaccgta 300

tctgcccacc ttgggggggag gacacaaggt cgggagccaa acgccacgat catgccttgg 360

tggcccatgg gtctttgtct aaaccggttt gcccatttgg cttgccgggc gggcgggcgc 420

ggcgggcccg gctcggccgg gtgggggctg ggttgccact gcgcttgcgc gctctatggc 480

tgggtattgg ggcgcgtgca cgctggggag ggagcccttc ctcttccccc tctcccaagt 540

taaacttgcg cgtgcgtatt gagacttgga gcgcggccac cggggttggg cgagggcggg 600

gccgttgtcc ggaaggggcg gggtcgcaga ggattcgggg cgcctgctcg cgcttcctgc 660

tgggtgtggt cgcctcccgc gcgcgcacta gaccgcccgg cgggggggcg aaggcgggtc 720

ttgcgcccgt ttggggaggg ggcggacacc tggcttcctg ccgtggggcc gcctccggac 780

cagcgtttgc ctcttatggt aataacgcgg ccggcctggg cttcatttgt cccctgagtt 840

tgggcgcgcg ccccctggcg gcccgtgacc gcggcttgcc ggaagtgggc agggcggcaa 900

cggctgcgcc tagtggcccg ccagtgaccg cgaccctctt ttgtgccctg atatag 956

<210> 451
<211> 959
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 451
gtaagcaggg acgccgggcc cagcgggcct tcgctctctc gtggctagta cctcactgca 60

gggtcctgag gatcactcag aacggacacc atgggcgggt ggagggtggt gccgggccgc 120

ggagcggaca ctggcacagc caactttacg cctagcgtgt agactctttg cagccacatt 180

cccgcggtgt agacactcgt gggcccgctc ccgctcggtg cgtggggctt ggggacacac 240

tagggtcgcg gtgtgggcat ttgatgagcc ggtgcggctt gcgggtgtta aaagccgtat 300

taggtccatc ttgagagtac acagtattgg gaaccagacg ctacgatcac gcctcaatgg 360

cctctgggtc tttgtccaaa ccggtttgcc tattcggctt gccgggcggg cgggcgggcg 420

ggcgggcgcg gcagggccgg ctcggccggg tgggggctgg gatgccactg cgcgtgcgct 480

ctctatcact gggcatcgag gcgcgtgtgc gctagggagg gagctcttcc tctccccctc 540

ttcctagtta gctgcgcgtg cgtattgagg ctgggagcgc ggctgcccgg ggttgggcga 600

gggcggggcc gttgtccgga aggggcgggg tcacagtggc acgggcgcct tgtttgcgct 660

tcctgctggg tgtggtcgcc tcccgcgcgc gcacaagccg cccgtcggcg cagtgtaggc 720

ggagcttgcg cccgtttggg gagggggcgg aggtctggct tcctgcccta ggtccgcctc 780

cgggccagcg tttgcctttt atggtaataa tgcggccggt ctgcgcttcc tttgtcccct 840

gagcttgggc gcgcgccccc tggcggctcg agcccgcggc ttgccggaag tgggcagggc 900

ggcagcggct gctcttggcg gccccgaggt gactatagcc ttcttttgtg tcttgatag 959

<210> 452
<211> 959
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 452
gtaagcaggg acgccgggcc cagcgggcct tcgctctctc gtggctagta cctcactgca 60

gggtcctgag gatcactcag aacggacacc atgggcgggt ggagggtggt gccgggccgc 120

ggagcggaca ctggcacagc caactttacg cctagcgtgt agactctttg cagccacatt 180

cccgcggtgt agacactcgt gggcccgctc ccgctcggtg cgtggggctt ggggacacac 240

tagggtcgcg gtgtgggcat ttgatgagcc ggtgcggctt gcgggtgtta aaagccgtat 300

taggtccatc ttgagagtac acagtattgg gaaccagacg ctacgatcac gcctcaatgg 360

cctctgggtc tttgtccaaa ccggtttgcc tattcggctt gccgggcggg cgggcgggcg 420

ggcgggcgcg gcagggccgg ctcggccggg tgggggctgg gatgccactg cgcgtgcgct 480

ctctatcact gggcatcgag gcgcgtgtgc gctagggagg gacctcttcc tctccccctc 540

ttcctagtta gctgcgcgtg cgtattgagg ctgggagcgc ggctgcccgg ggttgggcga 600

gggcggggcc gttgtccgga aggggcgggg tcacagtggc acgggcgcct tgtttgcgct 660

tcctgctggg tgtggtcgcc tcccgcgcgc gcacaagccg cccgtcggcg cagtgtaggc 720

ggagcttgcg cccgtttggg gagggggcgg aggtctggct tcctgcccta ggtccgcctc 780

cgggccagcg tttgcctttt atggtaataa tgcggccggt ctgcgcttcc tttgtcccct 840

gagcttgggc gcgcgccccc tggcggctcg agcccgcggc ttgccggaag tgggcagggc 900

ggcagcggct gctcttggcg gccccgaggt gactatagcc ttcttttgtg tcttgatag 959

<210> 453
<211> 929
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 453
gtaagcaggg acgtcgggcc cagcgggccc caactttacc ttggccacta cctcgctgca 60

ggatcgtgag gaacactcag aagggacacc gtagaggggt ggagcgtggt accgggccgc 120

ggagcagctg gcaaagctta actttcccgg cccctagggt gtagagtgtt tgcagtcgta 180

ttcccgcggt gtggacactc gtgggtacgc tcctgcttgg tgcgcggggc ttggggacac 240

actagagtcg cggtgtgggc atttggagag ccggtgcggc tgcgggtgtt aagccgcatc 300

tgtccacctt gaggggcaac agtattgggg tcaggcgtta caatcacgct ttgatggcct 360

atgggtcttt gtccaaaccg gttttgccat tcggcttggc gggcgcggcg gggccgctcg 420

gccgggtggg ggctgggatg ccattgcgcg tgcgcgctct atcactgggc attggggccg 480

tgcgcgctgg ggagggaact cttcctctcc ccctcttccg agttaagagt tgcgcgtgcg 540

tattgagact aggagcgcgg ccgccccggg ttgggcgagg gcgggccgtc caccggaagg 600

ggcggggtcg tagcggctag gcgcctgctc gcgcttcctg ctgggtgtgg tcgcctcccg 660

cgcgcgcact agccgcccgt cgcctcagtg taggcgggcc tgtgcccgtt tggggagggg 720

cggaggcctg gcttcctgcc gtgggtccgc ctccgggcca gcgtttgcct tttatggtaa 780

taatgcggct gtcctgcgct tcctttgtcc cctgagcttg ggcgcgcccc tggcggctcg 840

aggccgcggc tcgccggaag tgggcagggc ggcagcggct gctcttggcg gctccgcggt 900

gaccatagcc ctcttttgtg ccttgatag 929

<210> 454
<211> 767
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 454
gtaagcccgg ccagccgacc ggggcatgcg gccgcggccc ttcgcccgtg cagagccgcc 60

gtctgggccg cagcgggggg cgcatggggc ggaaccggac cgccgtgggg ggcgcgggag 120

aagcccctgg gcctccggag atgggggaca ccccacgcca gttcgcaggc gcgaggccgc 180

gctcgggcgg gcgcgctccg ggggtgccgc tctcggggcg ggggcaaccg gcggggtctt 240

tgtctgagcc gggctcttgc caatggggat cgcacggtgg gcgcggcgta gcccccgtca 300

ggcccggtgg gggctggggc gccatgcgcg tgcgcgctgg tcctttgggc gctaactgcg 360

tgcgcgctgg gaattggcgc taattgcgcg tgcgcgctgg gactcaatgg cgctaatcgc 420

gcgtgcgttc tggggcccgg gcgcttgcgc cacttcctgc ccgagccgct ggcgcccgag 480

ggtgtggccg ctgcgtgcgc gcgcgcgacc cggtcgctgt ttgaaccggg cggaggcggg 540

gctggcgccc ggttgggagg gggttggggc ctggcttcct gccgcgcgcc gcggggacgc 600

ctccgaccag tgtttgcctt ttatggtaat aacgcggccg gcccggcttc ctttgtcccc 660

aatctgggcg cgcgccggcg ccccctggcg gcctaaggac tcggcgcgcc ggaagtggcc 720

agggcggggg cgacttcggc tcacagcgcg cccggctatt ctcgcag 767

<210> 455
<211> 1005
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 455
gtaagcaggg acaacaggcc cagccggcca cagccctccc gtgggcagtg accgcgctgc 60

agggtcgcgg gggacactcg gcgcggacac cggggaaggc tggagggtgg tgccgggccg 120

cggagcggac actttcagat ccaactttca gtccagggtg tagacccttt acagccgcat 180

tgccacggtg tagacaccgg tggacccgct ctggctcaga gcacgcggct tgggggaacc 240

cattagggtc gcagtgtggg cgctatgaga gccgatgcag ctttcgggtg ttgaaccgta 300

tctgcccacc ttgggggggag gacacaaggt cgggagccaa acgccacgat catgccttgg 360

tggcccatgg gtctttgtct aaaccggttt gcccatttgg cttgccgggc gggcgggcgc 420

ggcgggcccg gctcggccgg gtgggggctg ggttgccact gcgcttgcgc gctctatggc 480

tgggtattgg ggcgcgtgca cgctggggag ggagcccttc ctcttccccc tctcccaagt 540

taaacttgcg cgtgcgtatt gagacttgga gcgcggccac cggggttggg cgagggcggg 600

gccgttgtcc ggaaggggcg gggtcgcaga ggattcgggg cgcctgctcg cgcttcctgc 660

tgggtgtggt cgcctcccgc gcgcgcacta gaccgcccgg cgggggggcg aaggcgggtc 720

ttgcgcccgt ttggggaggg ggcggacacc tggcttcctg ccgtggggcc gcctccggac 780

cagcgtttgc ctcttatggt aataacgcgg ccggcctggg cttcatttgt cccctgagtt 840

tgggcgcgcg ccccctggcg gcccgtgacc gcggcttgcc ggaagtgggc agggcggcaa 900

cggctgcgcc tagtggcccg ccagtgaccg cgaccctctt ttgtgccctg atatagttcg 960

ccagcctctg ctaaccatgt tcatgccttc ttctttttcc tacag 1005

<210> 456
<211> 1008
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 456
gtaagcaggg acgccgggcc cagcgggcct tcgctctctc gtggctagta cctcactgca 60

gggtcctgag gatcactcag aacggacacc atgggcgggt ggagggtggt gccgggccgc 120

ggagcggaca ctggcacagc caactttacg cctagcgtgt agactctttg cagccacatt 180

cccgcggtgt agacactcgt gggcccgctc ccgctcggtg cgtggggctt ggggacacac 240

tagggtcgcg gtgtgggcat ttgatgagcc ggtgcggctt gcgggtgtta aaagccgtat 300

taggtccatc ttgagagtac acagtattgg gaaccagacg ctacgatcac gcctcaatgg 360

cctctgggtc tttgtccaaa ccggtttgcc tattcggctt gccgggcggg cgggcgggcg 420

ggcgggcgcg gcagggccgg ctcggccggg tgggggctgg gatgccactg cgcgtgcgct 480

ctctatcact gggcatcgag gcgcgtgtgc gctagggagg gacctcttcc tctccccctc 540

ttcctagtta gctgcgcgtg cgtattgagg ctgggagcgc ggctgcccgg ggttgggcga 600

gggcggggcc gttgtccgga aggggcgggg tcacagtggc acgggcgcct tgtttgcgct 660

tcctgctggg tgtggtcgcc tcccgcgcgc gcacaagccg cccgtcggcg cagtgtaggc 720

ggagcttgcg cccgtttggg gagggggcgg aggtctggct tcctgcccta ggtccgcctc 780

cgggccagcg tttgcctttt atggtaataa tgcggccggt ctgcgcttcc tttgtcccct 840

gagcttgggc gcgcgccccc tggcggctcg agcccgcggc ttgccggaag tgggcagggc 900

ggcagcggct gctcttggcg gccccgaggt gactatagcc ttcttttgtg tcttgatagt 960

tcgccagcct ctgctaacca tgttcatgcc ttcttctttt tcctacag 1008

<210> 457
<211> 978
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 457
gtaagcaggg acgtcgggcc cagcgggccc caactttacc ttggccacta cctcgctgca 60

ggatcgtgag gaacactcag aagggacacc gtagaggggt ggagcgtggt accgggccgc 120

ggagcagctg gcaaagctta actttcccgg cccctagggt gtagagtgtt tgcagtcgta 180

ttcccgcggt gtggacactc gtgggtacgc tcctgcttgg tgcgcggggc ttggggacac 240

actagagtcg cggtgtgggc atttggagag ccggtgcggc tgcgggtgtt aagccgcatc 300

tgtccacctt gaggggcaac agtattgggg tcaggcgtta caatcacgct ttgatggcct 360

atgggtcttt gtccaaaccg gttttgccat tcggcttggc gggcgcggcg gggccgctcg 420

gccgggtggg ggctgggatg ccattgcgcg tgcgcgctct atcactgggc attggggccg 480

tgcgcgctgg ggagggaact cttcctctcc ccctcttccg agttaagagt tgcgcgtgcg 540

tattgagact aggagcgcgg ccgccccggg ttgggcgagg gcgggccgtc caccggaagg 600

ggcggggtcg tagcggctag gcgcctgctc gcgcttcctg ctgggtgtgg tcgcctcccg 660

cgcgcgcact agccgcccgt cgcctcagtg taggcgggcc tgtgcccgtt tggggagggg 720

cggaggcctg gcttcctgcc gtgggtccgc ctccgggcca gcgtttgcct tttatggtaa 780

taatgcggct gtcctgcgct tcctttgtcc cctgagcttg ggcgcgcccc tggcggctcg 840

aggccgcggc tcgccggaag tgggcagggc ggcagcggct gctcttggcg gctccgcggt 900

gaccatagcc ctcttttgtg ccttgatagt tcgccagcct ctgctaacca tgttcatgcc 960

ttcttctttt tcctacag 978

<210> 458
<211> 833
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 458
gtaagcccgg ccagccgacc ggggcatgcg gccgcggccc ttcgcccgtg cagagccgcc 60

gtctgggccg cagcgggggg cgcatggggc ggaaccggac cgccgtgggg ggcgcgggag 120

aagcccctgg gcctccggag atgggggaca ccccacgcca gttcgcaggc gcgaggccgc 180

gctcgggcgg gcgcgctccg ggggtgccgc tctcggggcg ggggcaaccg gcggggtctt 240

tgtctgagcc gggctcttgc caatggggat cgcacggtgg gcgcggcgta gcccccgtca 300

ggcccggtgg gggctggggc gccatgcgcg tgcgcgctgg tcctttgggc gctaactgcg 360

tgcgcgctgg gaattggcgc taattgcgcg tgcgcgctgg gactcaatgg cgctaatcgc 420

gcgtgcgttc tggggcccgg gcgcttgcgc cacttcctgc ccgagccgct ggcgcccgag 480

ggtgtggccg ctgcgtgcgc gcgcgcgacc cggtcgctgt ttgaaccggg cggaggcggg 540

gctggcgccc ggttgggagg gggttggggc ctggcttcct gccgcgcgcc gcggggacgc 600

ctccgaccag tgtttgcctt ttatggtaat aacgcggccg gcccggcttc ctttgtcccc 660

aatctgggcg cgcgccggcg ccccctggcg gcctaaggac tcggcgcgcc ggaagtggcc 720

agggcggcag cggctgctct tggcggcccc gaggtgacta tagccttctt ttgtgtcttg 780

atagttcgcc agcctctgct aaccatgttc atgccttctt ctttttccta cag 833

<210> 459
<211> 240
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 459
gtaaagacgg gcggagagaa acccgggagg ctagggacgg cctgaaggcg gcaggggcgg 60

gcgcaggccg gatgtgttcg cgccgctgcg gggtgggccc gggcggcctc cgcattgcag 120

gggcgggcgg aggacgtgat gcggcgcggg ctgggcatgg aggcctggtg ggggagggga 180

ggggaggcgt gtgtgtcggc cggggccact aggcgctcac tgttctctcc ctccgcgcag 240

<210> 460
<211> 240
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 460
gtgaagacgg gcggagagaa acccgggagg ctagggacgg cctgaaggcg gcaggggcgg 60

gcgcaggccg gatgtgttcg cgccgctgcg gggtgggccc gggcggcctc cgcattgcag 120

gggcgggcgg aggacgtgat gcggcgcggg ctgggcatgg aggcctggtg ggggagggga 180

ggggaggcgt gtgtgtcggc cggggccact aggcgctcac tgttctctcc ctccgcgcag 240

<210> 461
<211> 240
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 461
gtgaaaatcg cggagtgggc cgcaggaggc cggggacagt cggaaactgg gaaggggagt 60

gggcactgta cgggtctagg gatgctggtg cgaagtgtgc aagccggacc caggctccgc 120

attgcagggg ggggatgatg gaggacgtga tggggcgcac ggcgggaatg gaggcggggt 180

gggggagggg actgcctggt gtccttcggg ccacgctaat ctcattttct tctcctgcag 240

<210> 462
<211> 188
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 462
gtgtggcagg cttgagatcc agctgttggg gtgagtactc cctctcaaaa gcgggcatta 60

cttctgcgct aagattgtca gtttccaaaa acgaggagga tttgatattc acctggcccg 120

atctggccat acacttgagt gacaatgaca tccactttgc ctttctctcc acaggtgtcc 180

actcccag 188

<210> 463
<211> 193
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 463
gtgaggtgtg gcaggcttga gatccagctg ttggggtgag tactccctct caaaagcggg 60

cattacttct gcgctaagat tgtcagtttc caaaaacgag gaggatttga tattcacctg 120

gcccgatctg gccatacact tgagtgacaa tgacatccac tttgcctttc tctccacagg 180

tgtccactcc cag 193

<210> 464
<211> 1018
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 464
gtgagtgacc ccggagcggc ggtgctcggg gccggagacg gtacctcggg gctgcgggac 60

gtgtcggtgg cggtccgcgg aggccggcct gggaggagac atggctgccg gggcggcggg 120

acgtggacgg acggggcggc tggcgccatg tctgcgcgtc gggctgtggc ctcggcacgg 180

cggccgttgt cccctcggcg gacggtgctg atttggcagt gggcacagcc aggcctctgg 240

ccgccctcgg gcgtgggatc gctggtcccg tccccggcgg agggccagcg tcccttacg 300

aggtgacagc cgggtgggcg gtcttccgtt tgcacatccg cgtcccctgt ggccggcctc 360

cgcgcgtcac gtcgctgctg taggaccccc tcctgaacgg tgacgtgctc cctgctaacc 420

aaatggattc cgaaggtagc ctgggcaagg gctctcgcat cccgccatgt ggaacccgct 480

ggctttgggt ggcgcaaagc gtgtcccatg ccgagcgtct ggaggttctg tgcctccaca 540

cgtgtggacc catcgagttg tcatgagtag tgtcctgctg aggttcccac gcacttctag 600

gcactgcttg cttggctgtg aagctggggt ggcaggcgca gttttgttgc ctgtggatgc 660

gttggaagat tgggggcctt tggttattgc ggtggtgact gtctttgaga tagggtttca 720

cgtagcccag gcttgctcag gtggttagtt cagggtttgt ttagttaggg ctggacttct 780

gacgtgctgg ctgtggactc ttgatctgta tgctaacgag gtgcttgggc ttgcaggctc 840

gagtcaccgc ggactcactg ttccttatga atgacaaccg aggctccatc ttgggctgac 900

ggtcgtggtt gtagtggctg tgtgcgcact ggagtgttgt gtgggcaggc cacggccacg 960

cgtgggaaac gacatgctgc tgcctgcagt ttgctcagct gcccctcccc catcccag 1018

<210> 465
<211> 1018
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 465
gtgagtgacc ccggagcggc ggtgctcggg gccggagtcg gtacctcggg gctgcgggac 60

gtgtcggtgg cggtccgcgg aggccggcct gggaggagac atggctgccg gggcggcggg 120

acgtggacgg acggggcggc tggcgccatg tctgcgcgtc gggctgtggc ctcggcacgg 180

cggccgttgt cccctcggcg gacggtgctg atttggcagt gggcacagcc aggcctctgg 240

ccgccctcgg gcgtgggatc gctggtcccg tccccggcgg agggccagcg tccctttacg 300

aggtgacagc cgggtgggcg gacttccgtt tgcacatccg cgtcccctgt ggccggcctc 360

cgcgcgtcac gtcgctgctg taggaccccc tcctgaacgg tgacgtgctc cctgctaacc 420

aaatggattc cgaaggtagc ctgggcaagg gctctcgcat cccgccatgt ggaacccgct 480

ggctttgggt ggcgcaaagc gtgtcccatg ccgagcgtct ggaggttctg tgcctccaca 540

cgtgtggacc catcgagttg tcatgagtag tgtcctgctg aggttcccac gcacttctag 600

gcactgcttg cttggctgtg aagctggggt ggcaggcgca gttttgttgc ctgtggatgc 660

gttggaagat tgggggcctt tggttattgc ggtggtgact gtctttgaga tagggtttca 720

cgtagcccag gcttgctcag gtggttagtt cagggtttgt ttagttaggg ctggacttct 780

gacgtgctgg ctgtggactc ttgatctgta tgctaacgag gtgcttgggc ttgcaggctc 840

gagtcaccgc ggactcactg ttccttatga atgacaaccg aggctccatc ttgggctgac 900

ggtcgtggtt gtagtggctg tgtgcgcact ggagtgttgt gtgggcaggc cacggccacg 960

cgtgggaaac gacatgctgc tgcctgcagt ttgctcagct gcccctcccc catcccag 1018

<210> 466
<211> 1028

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 466
gtgagtaacc ctgcctcgct ggtgccccgg agcggcggcg gggcctccgc ggggcctacg 60

ctgcctagcc tgggacgctg gggccccccg tgccaggagg agacgtagcg gcggcggggc 120

cggaggaccc ggggctgggg aagcggccgc cgccatgtct gtgcgccgcg ctgttcaccg 180

agcccтttct ccgtttccga gggcgccata accttgccca gacctggttg gagctgggtt 240

gttagcgggg atgggggtgg ggaatgatga tgtggcaggc gtagtaatgg cgggcaccgc 300

ggtggaagcg gggagacagg gaggcgcctt atgtaacccg cgggccgcga gtttgagatc 360

gattttctgc cgggggacta ggggcggcag ggaaatggca gaacgagcaa agcgacacct 420

gaaaggctcc ccttttcctt ccaaatacct tctcctgatg ctgttaatcg tcgaccttag 480

gcacttgtcc ttcctatgac tcccagatgt acaaagactc ttattgagac acgaggtgta 540

ggcttgtggc agttagggcc gttccggctc cccgttattt cctggggtgg gtggccttgt 600

ctgatcccgt ttgccaaggg gtgaccttgc attttatgat gaagcttctt gctcggggaa 660

gtttgggtgg cccggtgaca acgtggaggg ggctttagga gaggattcat cccttacgtg 720

tttggcccca aatgagactt tagtatttgt acctggtatc aaggaaatct gttgacactc 780

agttttattc ctgagcactt ttatttctgg gttgtcaatc atgaatgaca cctattaacg 840

gtggttcctt ggagattgcg gggtggctct taaggggtgt taggctggca agattcggtg 900

ggcttggggc accccagcac caacccccctc ctggccttgg gcatgctggt tcgtttggac 960

tgaacgctcc gtgccatgct gtgttcctgg aaatcacgag ctggtctgag cctccttgtc 1020

ttgcccag 1028

<210> 467
<211> 1027
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 467
gtgagtaacc ctgcctcgct ggtgccccgg agcggcggcg gggcctccgc ggggcctacg 60

ctgcctagcc tgggacgctg gggcccccg tgccaggagg agaggtagcg gcggcggggc 120

cggaggaccc ggggctgggg aagcggccgc cgccatgtct gtgcgccgcg ctgttcaccg 180

agccctttct ccgtttccga gggcgccata accttgccca gacctggttg gagctgggtt 240

gttagcgggg atgggggtgg ggaatgatga tgtggcaggc gtagtaatgg cgggcaccgc 300

ggtggaagcg gggagacagg gaggcgcctt atgtaacccg cgggccgcga gtttgagatc 360

gattttctgc cgggggacta ggggcggcag ggaatggcag aacgagcaaa gcgacacctg 420

aaaggctccc cttttccttc caaatacctt ctcctgatgc tgttaatcgt cgaccttagg 480

cacttgtcct tcctatgact cccagatgta caaagactct tattgagaca cgaggtgtag 540

gcttgtggca gttagggccg ttccggctcc ccgttatttc ctggggtggg tggccttgtc 600

tgatcccgtt tgccaagggg tgaccttgca ttttatgatg aagcttcttg ctcggggaag 660

tttgggtggc ccggtgacaa cgtggagggg gctttaggag aggattcatc ccttacgtgt 720

ttggccccaa atgagacttt agtatttgta cctggtatca aggaaatctg ttgacactca 780

gttttattcc tgagcacttt tatttctggg ttgtcaatca tgaatgacac ctattaacgg 840

tggttccttg gagattgcgg ggtggctctt aaggggtgtt aggctggcaa gattcggtgg 900

gcttggggca ccccagcacc aacccccctcc tggccttggg catgctggtt cgtttggact 960

gaacgctccg tgccatgctg tgttcctgga aatcacgagc tggtctgagc ctccttgtct 1020

tgcccag 1027

<210> 468
<211> 935
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 468
gtgagtctcc tcggctccgc tagactcggg gaccgagacg aatctctggg gcagcgggac 60

gtggctgtag cgggacgctg agagggacgg gaggaagaga catggctgcc ctggcccggg 120

cggcaggacg tggtcgggcc gcggcgccat atctgcgcgt ccctgagggc cttgggagtg 180

tcaactgccg aggtcggggt gttttcttga agtccttcaa ctccccgcgg ccgccggggt 240

gactgcggga ggggttgtgc ttggtgatgt ggcagcgggc aaagcgccgt ccccgcgccc 300

ctggtgacgg gcggagggtg tcctcgggag gtgacagcct gtagggctgg cttccttgga 360

cacctccagt gggctgaacg ccttccgggc cctttccggt agcccccgtc tctgttttct 420

atctgagttc acacgtgagc accggtcccc ataatctaag aaagtggctc actgggccta 480

gtggcgcatt gtggcctttg atccgggctt tgaccttggc gcacagcacc cagtggtttg 540

gggaagaggt gtgtgtagca gaggaggttt tttcgtgctt tggtcccaat caatccggca 600

tctttgcagt gccgaggtgg ccgtgcacct tggctttgaa ttcttgtgct gaggttatgt 660

gacttgagcc tcaagatagg gtcttctagc acaggcttgc tcttaagtgt cgcagttgtc 720

ggtttcggcg tttgtttaga gctgtggaca catctgtgaa cttttgatgc ttatttcaga 780

ggtcctgggt tgtacgtttg agtcacactg tgagctcagc tccaatcttg ggccgacatc 840

tggttcctgc ccctgctgtg gggtgctatt gacccaccga tgcctgccaa gttgggttcc 900

cagaatcagc ctggctgccc atccccccac cacag 935

<210> 469
<211> 935
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 469
gtgagtctcc tcggctccgc tagactcggg gaccgagagg aatctctggg gcagcgggac 60

gtggctgtag cgggacgctg agagggacgg gaggaagaga catggctgcc ctggcccggg 120

cggcaggacg tggtcgggcc gcggcgccat atctgcgcgt ccctgagggc cttgggagtg 180

tcaactgccg aggtcggggt gttttcttga agtccttcaa ctccccgcgg ccgccggggt 240

gactgcggga ggggttgtgc ttggtgatgt ggcagcgggc aaagcgccgt ccccgcgccc 300

ctggtgacgg gcggagggtg tcctcgggag gtgacagcct gtagggctgg cttccttgga 360

cacctccagt gggctgaacg ccttccgggc cctttccggt agcccccgtg tctgttttct 420

atctgagttc acacgtgagc accggtcccc ataatctaag aaagtggctc actgggccta 480

gtggcgcatt gtggcctttg atccgggctt tgaccttggc gcacagcacc cagtggtttg 540

gggaagaggt gtgtgtagca gaggaggttt tttcgtgctt tggtcccaat caatccggca 600

tctttgcagt gccgaggtgg ccgtgcacct tggctttgaa ttcttgtgct gaggttatgt 660

gacttgagcc tcaagatagg gtgttctagc acaggcttgc tcttaagtgt cgcagttgtc 720

ggtttcggcg tttgtttaga gctgtggaca catctgtgaa cttttgatgc ttatttcaga 780

ggtcctgggt tgtacgtttg agtcacactg tgagctcagc tccaatcttg ggccgacatc 840

tggttcctgc ccctgctgtg gggtgctatt gacccaccga tgcctgccaa gttgggttcc 900

cagaatcagc ctggctgccc atccccccac cacag 935

<210> 470
<211> 874
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 470
gtgagtgtcc gcggcgcggc aagacttggg gactgagacg agtcttcggg gcagcgggag 60

gtggccggag cgggacccgg aaaagaaagg agacatggct gcctctgcat gggtggcggg 120

acgtggtcgg ctcgcggcgc catatctgca cctcctctgc ccgtctttgg gagtgtcggc 180

ctcctgaagt tggagtgttt tctctaattc cttcgtccag ctctcctttc cgagaacgct 240

ggggtggctg tgggaggggc ggcgtttgct gatgtggcag cggacataat gctgtatagc 300

cctgtgccca tggtgacagg gtgatggtgc tcccgggaag tgacagcctg caggggtggc 360

tcacatggag acctctagtg agctgagcgt cttccgccct ggcctttatc tccttccttg 420

gtccgcacaa tggaaccggt cccctccaag ctgagaaaat ggctcatggg cctaggggcc 480

tattgtggcc tttgatccca gcatttgacc ttggcgcaca aggcgggttg gcagtgtgta 540

gcaggcgagg ttttgtcggc ctgtgtgggc cccatctcgt gcgggccccc tgtcgcctgc 600

attgttggac tgctggggtg gcagtccagc ttggcgttga ttacgtggtg cggtctcagc 660

ctaggctccc tggtactctt gttctagttg tcattttggt tagggttggg ttcctgacac 720

atctggtgac tcttgatgct tcttaggtgg taggcttgta ggtgtgagtc gaatgagcgc 780

cagttttggg gagacagctc tttggaaccc cacaatgggg tgctatcgac ccgagttccc 840

agaatcagtc ctgaccgccc ttcccccacc acag 874

<210> 471
<211> 874
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 471
gtgagtgtcc gcggcgcggc aagacttggg gactgtgacg agacttcggg gcagcgggag 60

gtggccggag cgggacccgg aaaagaaagg agacatggct gcctctgcat gggtggcggg 120

acgtggtcgg ctcgcggcgc catatctgca cctcctctgc ccgtctttgg gagtgtcggc 180

ctcctgaagt tggagtgttt tctctaattc cttcgtccag ctctcctttc cgagaacgct 240

ggggtggctg tgggaggggc ggcgtttgct gatgtggcag cggacataat gctgtatagc 300

cctgtgccca tggtgacagg gtgatggtgc tcccgggaag tgacagcctg caggggtggc 360

tcacatggtg acctctagtg agctgagcct cttccgccct ggcctttatc tccttccttg 420

gtccgcacaa tggaaccggt cccctccaag ctgagaaaat ggctcatggg cctaggggcc 480

tattgtggcc tttgatccca gcatttgacc ttggcgcaca aggcgggttg gcagtgtgta 540

gcaggcgagg ttttgtcggc ctgtgtgggc cccatctcgt gcgggccccc tgtcgcctgc 600

attgttggac tgctggggtg gcagtccagc ttggcgttga ttacgtggtg cggtcacagc 660

ctaggctccc tggtactctt gttctagttg tcattttggt tagggttggg ttcctgacac 720

atctggtgac tcttgatgct tcttaggtgg taggcttgta ggtgtgagtc gaatgagcgc 780

cagttttggg gagacagctc tttggaaccc cacaatgggg tgctatcgac ccgagttccc 840

agaatcagtc ctgaccgccc ttcccccacc acag 874

<210> 472
<211> 66
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 472
gtaaatataa aatttttaag tgtataatgt gttaaactac tgattctaat tgtttgtgta 60

ttttag 66

<210> 473
<211> 530
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 473
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgcccct attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt attactaatg 300

gggatttcca atgactaata caacgggcag tacgcccagt acgtatgact aatgggactt 360

tccataatcc cgccccattg acgtcaatgg gcatccgttc tggcaccaaa atgaatggga 420

atttccaata tgagtcataa accccgcccc attgacgcac attacacgtc aatgggcggt 480

aggcgtgccc tatgggcggt ctatataagc agagcccgtt tagtgaaccg 530

<210> 474
<211> 1388
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 474
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgcccct attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt attactaatg 300

gggatttcca atgactaata caacgggcag tacgcccagt acgtatgact aatgggactt 360

tccataatcc cgccccattg acgtcaatgg gcatccgttc tggcaccaaa atgaatggga 420

atttccaata tgagtcataa accccgcccc attgacgcac attacacgtc aatgggcggt 480

aggcgtgccc tatgggcggt ctatataagc agagcccgtt tagtgaaccg tcacttcgct 540

tggagccacc gtccacgctg tttggagctc catagaagga accgggaccc agccagcctc 600

cgtagccggg aacggtgcat tggaacgcgg atacagcgtg ccaatagtga cgtaagtact 660

gcctatagat ataggcgtgg ctatatacta tctatagcat gctatgcatt atcttggctt 720

tggaccaggg cgcttccgct tactcatact atagggtgat ggtatagctt aacatatagg 780

tggagctatt gattgggact gccccctatt ggtgacggtg tttcctatat ctgatcaata 840

ctatggccct ctgccatgcc gcccctcttg gcctatagcc aatctatcgg tgtcggactc 900

tgcttagacc ccctttccaa ctcccagaga ctgacacgcg gactctgttt gtttttaagg 960

atggctcttt tattcttaga ccccacaaac accgtccggg gctaacaggg gatctccacg 1020

gcgatctcgg gtacccccgg ccacgggagt gtggttagtc tgtcctcctc cggctcctcg 1080

ggccaggtcc ccagcagctc ttcttgttct tcatcgtcgc tgggcacctc tcggctgcta 1140

attgtcgagg ccagactcag gcagatcacg atccccacca ctattaccat gccgcccagg 1200

gccgaggctg tggggtatgc ctctaacaac gagcccgggg accctacatg ggtccacgga 1260

ctctctgctg tctggagact taaggccagg gaagaagaga cagatgatga agtccctgac 1320

agctgagaag aaaaggtaag ggagctcgtt actcccgtgg tgttgtgata gttaacagcg 1380

gtggaggg 1388

<210> 475
<211> 1501
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 475
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgcccct attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt attactaatg 300

gggatttcca atgactaata caacgggcag tacgcccagt acgtatgact aatgggactt 360

tccataatcc cgccccattg acgtcaatgg gcatccgttc tggcaccaaa atgaatggga 420

atttccaata tgagtcataa accccgcccc attgacgcac attacacgtc aatgggcggt 480

aggcgtgccc tatgggcggt ctatataagc agagcccgtt tagtgaaccg tcacttcgct 540

tggagccacc gtccacgctg tttggagctc catagaagga accgggaccc agccagcctc 600

cgtagccggg aacggtgcat tggaacgcgg atacagcgtg ccaatagtga cgtaagtact 660

gcctatagat ataggcgtgg ctatatacta tctatagcat gctatgcatt atcttggctt 720

tggaccaggg cgcttccgct tactcatact atagggtgat ggtatagctt aacatatagg 780

tggagctatt gattgggact gccccctatt ggtgacggtg tttcctatat ctgatcaata 840

ctatggccct ctgccatgcc gcccctcttg gcctatagcc aatctatcgg tgtcggactc 900

tgcttagacc ccctttccaa ctcccagaga ctgacacgcg gactctgttt gtttttaagg 960

atggctcttt tattcttaga ccccacaaac accgtccggg gctaacaggg gatctccacg 1020

gcgatctcgg gtacccccgg ccacgggagt gtggttagtc tgtcctcctc cggctcctcg 1080

ggccaggtcc ccagcagctc ttcttgttct tcatcgtcgc tgggcacctc tcggctgcta 1140

attgtcgagg ccagactcag gcagatcacg atccccacca ctattaccat gccgcccagg 1200

gccgaggctg tggggtatgc ctctaacaac gagcccgggg accctacatg ggtccacgga 1260

ctctctgctg tctggagact taaggccagg gaagaagaga cagatgatga agtccctgac 1320

agctgagaag aaaaggtaag ggagctcgtt actcccgtgg tgttgtgata gttaacagcg 1380

gtggagggca gtgtagtctg agcagtactc gttgctgccg cgcgcgccac cagacataat 1440

agctgacaga ctaacagaag cctctgctaa ccatgttcat gccttcttct ttttcctaca 1500

g 1501

<210> 476
<211> 1507
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 476
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgccccc attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt attactaatg 300

gggatttcca atgactaata caacgggcag tacgcccagt acgtatgact aatgggactt 360

tccataatcc cgccccattg acgtcaatgg gcatccgttc tggcaccaaa atgaatggga 420

atttccaata tgagtcataa accccgcccc attgacgcac attacacgtc aatgggcggt 480

aggcgtgccc tatgggcggt ctatataagc agagcccgtt tagtgaaccg tcacttcgct 540

tggagccacc gtccacgctg tttggagctc catagaagga accgggaccc agccagcctc 600

cgtagccggg aacggtgcat tggaacgcgg atacagcgtg ccaatagtga cgtaagtact 660

gcctatagat ataggcgtgg ctatatacta tctatagcat gctatgcatt atcttggctt 720

tggaccaggg cgcttccgct tactcatact atagggtgat ggtatagctt aacatatagg 780

tggagctatt gattgggact gccccctatt ggtgacggtg tttcctatat ctgatcaata 840

ctatggccct ctgccatgcc gcccctcttg gcctatagcc aatctatcgg tgtcggactc 900

tgcttagacc ccctttccaa ctcccagaga ctgacacgcg gactctgttt gtttttaagg 960

atggctcttt tattcttaga ccccacaaac accgtccggg gctaacaggg gatctccacg 1020

gcgatctcgg gtacccccgg ccacgggagt gtggttagtc tgtcctcctc cggctcctcg 1080

ggccaggtcc ccagcagctc ttcttgttct tcatcgtcgc tgggcacctc tcggctgcta 1140

attgtcgagg ccagactcag gcagatcacg atccccacca ctattaccat gccgcccagg 1200

gccgaggctg tggggtatgc ctctaacaac gagcccgggg accctacatg ggtccacgga 1260

ctctctgctg tctggagact taaggccagg gaagaagaga cagatgatga agtccctgac 1320

agctgagaag aaaaggtaag ggagctcgtt actcccgtgg tgttgtgata gttaacagcg 1380

gtggagggta gttgtcgctc agtcgtcact gccgccagca gagggagaca taagtacacc 1440

aggctcaacc acactgtctt catggatgtt tgcaggtaga gaccacacgc ggcacttcac 1500

cagagag 1507

<210> 477
<211> 833
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 477
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgcccct attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt attactaatg 300

gggatttcca atgactaata caacgggcag tacgcccagt acgtatgact aatgggactt 360

tccataatcc cgccccattg acgtcaatgg gcatccgttc tggcaccaaa atgaatggga 420

atttccaata tgagtcataa accccgcccc attgacgcac attacacgtc aatgggcggt 480

aggcgtgccc tatgggcggt ctatataagc agagcccgtt tagtgaaccg tcacttcgct 540

tggagccacc gtccacgctg tttggagctc catagaagga accgggaacc tgaagtcctt 600

tgaagatatc accaaggagt gtgataagaa ccccgggaag gacattctgc aagaacttgg 660

tgagtaggca tgatgttctg tgtcttgcta accacacagt ctctgcatgt gaaaagagat 720

gataggatga gcttattaac ctcggggtgg ttcatgcatg tgtcaggctg ggggtggaga 780

gacagctgtg gaacttagtg actcatgaca gctatctctg ttatcctcca cag 833

<210> 478
<211> 846
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 478
ttcaatgtct atatatggag atccgcatat tgacgtcaat atcggtaaat ggcccacttg 60

gctgaccgcc ccacgacccc cgcccattga cgtcaatggt gggactttcc attgacgtca 120

atgggcgggg aacggatatg agccatagaa tgtactgcca agtgggccat ttaccgttca 180

ccacgcccct attgacgtca atgacggtaa atggcccgcc tggctgtacg ccaattgcat 240

catcctattg tttttctatg ggaatttccc tattggcagt acatcaacgt attactaatg 300

gggatttcca atgactaata caacgggcag tacgcccagt acgtatgact aatgggactt 360

tccataatcc cgccccattg acgtcaatgg gcatccgttc tggcaccaaa atgaatggga 420

atttccaata tgagtcataa accccgcccc attgacgcac attacacgtc aatgggcggt 480

aggcgtgccc tatgggcggt ctatataagc agagcccgtt tagtgaaccg tcacttcgct 540

tggagccacc gtccacgctg tttggagctc catagaagat accgggaccg atccagcctc 600

cgcggccggg aacggtgcat tggaacgcgg attccccgtg ccaagagtga ccctggcaga 660

actcggtaag tctgttgaca tgtatgtgat gtatactaac ctgcatggga cgtggattta 720

cttgtgtatg tcagatagag taaagattaa ctcttgcatg tgagcggggc atcgagatag 780

cgataaatga gtcaggagga cggagcctct gctaaccatg ttcatgcctt cttctttttc 840

ctacag 846

<210> 479
<211> 1011
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 479
ccaacattac cgccatgttg acattgatta ttgactagtt attaatagta atcaattacg 60

gggtcattag ttcatagccc atatatggag ttccgcgtta cataacttac ggtaaatggc 120

ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac gtatgttccc 180

atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt acggtaaact 240

gcccacttgg cagtacatca agtgtatcat atgccaagta cgcccccctat tgacgtcaat 300

gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttatggga ctttcctact 360

tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt ttggcagtac 420

atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca ccccattgac 480

gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg tcgtaacaac 540

tccgccccat tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta tataagcaga 600

gctcgtttag tgaaccgtca gatcgcctgg agacgccatc cacgctgttt tgacctccat 660

agaagatacc gggaccgatc cagcctccgc ggccgggaac ggtgcattgg aacgcggatt 720

ccccgtgcca agagtgaccc tggcagaact cggtaagtct gttgacatgt atgtgatgta 780

tactaacctg catgggacgt ggatttactt gtgtatgtca gatagagtaa agattaactc 840

ttgcatgtga gcggggcatc gagatagcga taaatgagtc aggaggacgg agcctctgct 900

aaccatgttc atgccttctt ctttttccta cagctcctgg gcaacgtgct ggtagcttcc 960

ttcttctttt tcctagaagc tcagaataaa cgctcaactt tggccgccac c 1011

<210> 480
<211> 1021
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 480
ccaacattac cgccatgttg acattgatta ttgactagtt attaatagta atcaattacg 60

gggtcattag ttcatagccc atatatggag ttccgcgtta cataacttac ggtaaatggc 120

ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac gtatgttccc 180

atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt acggtaaact 240

gcccacttgg cagtacatca agtgtatcat atgccaagta cgcccccctat tgacgtcaat 300

gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttatggga ctttcctact 360

tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt ttggcagtac 420

atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca ccccattgac 480

gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg tcgtaacaac 540

tccgccccat tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta tataagcaga 600

gctcgtttag tgaaccgtca gatcgcctgg agacgccatc cacgctgttt tgacctccat 660

agaagatacc gggaccgatc cagcctccgc ggccgggaac ggtgcattgg aacgcggatt 720

ccccgtgcca agagtgaccc tggcagaact cggtaagtct gttgacatgt atgtgatgta 780

tactaacctg catgggacgt ggatttactt gtgtatgtca gatagagtaa agattaactc 840

ttgcatgtga gcggggcatc gagatagcga taaatgagtc aggaggacgg agcctctgct 900

aaccatgttc atgccttctt ctttttccta cagctcctgg gcaacgtgct ggttattgtg 960

ctgtctcatc attttggcaa agaatttcac cgtccttgac acgaagtttg ctgccgccac 1020

c 1021

<210> 481
<211> 1581
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 481
ggagacgact tacggtaaat ggcccgcctg gctgaccgcc caacgacccc cgcccattga 60

cgtcaataat gacgtatgtt cccatagtaa cgccaatagg gactttccat tgacgtcaat 120

gggtggagta tttacggtaa actgcccact tggcagtaca tcaagtgtat catatgccaa 180

gtccgccccc tattgacgtc aatgacggta aatggcccgc ctggcattat gcccagtaca 240

tgaccttacg ggactttcct acttggcagt acatctacgt attagtcatc gctattacca 300

tgctgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 360

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 420

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 480

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagaggcc 540

atccacgctg ttttgacctc catagtggac accgggaccg atccagcctc cgcggccggg 600

aacggtgcat tggaacgcgg attccccgtg ccaagagtga cgtaagtacc gcctatagag 660

tctataggcc cacccccttg gcttcttatg catgctatac tgtttttggc ttggggtcta 720

tacacccccg cttcctcatg ttataggtga tggtatagct tagcctatag gtgtgggtta 780

ttgaccatta ttgaccactc ccctattggt gacgatactt tccattacta atccataaca 840

tggctctttg ccacaactct ctttattggc tatatgccaa tacactgtcc ttcagagact 900

gacacggact ctgtattttt acaggatggg ttctcattta ttatttacaa attcacatat 960

acaacaccac cgtccccagt gcccgcagtt tttattaaac ataacgtggg atctccacgc 1020

gaatctcggg tacgtgttcc ggacatgggt tcttctccgg tagcggcgga gcttctacat 1080

ccgagccctg ctcccatgcc tccagcgact catggtcgct cggcagctcc ttgctcctaa 1140

cagtggaggc cagacttagg cacagcacga tgcccaccac caccagtgtg ccgcacaagg 1200

ccgtggcggt agggtatgtg tctgaaaatg agctcgggga gcgggcttgc accgctgacg 1260

catttgaaag acttaaggca gcggcagaag aagatgcagg cagctgagtt gttgtgttct 1320

gataagagtc agaggtaact cccgttgcgg tgctgttaac ggtggagggc agtgtagtct 1380

gagcagtact cgttgctgcc gcgcgcgcca ccagacataa tagctgacag actaacagaa 1440

gcctctgcta accatgttca tgccttcttc tttttcctac agctcctggg caacgtgctg 1500

gttattgtgc tgtctcatca ttttggcaaa gaattccgtc tcaggggaca gaccaccaat 1560

aattcaaagc aagccgccac c 1581

<210> 482
<211> 1560
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 482
ggagacgact tacggtaaat ggcccgcctg gctgaccgcc caacgacccc cgcccattga 60

cgtcaataat gacgtatgtt cccatagtaa cgccaatagg gactttccat tgacgtcaat 120

gggtggagta tttacggtaa actgcccact tggcagtaca tcaagtgtat catatgccaa 180

gtccgccccc tattgacgtc aatgacggta aatggcccgc ctggcattat gcccagtaca 240

tgaccttacg ggactttcct acttggcagt acatctacgt attagtcatc gctattacca 300

tgctgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 360

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 420

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 480

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagaggcc 540

atccacgctg ttttgacctc catagtggac accgggaccg atccagcctc cgcggccggg 600

aacggtgcat tggaacgcgg attccccgtg ccaagagtga cgtaagtacc gcctatagag 660

tctataggcc cacccccttg gcttcttatg catgctatac tgtttttggc ttggggtcta 720

tacacccccg cttcctcatg ttataggtga tggtatagct tagcctatag gtgtgggtta 780

ttgaccatta ttgaccactc ccctattggt gacgatactt tccattacta atccataaca 840

tggctctttg ccacaactct ctttattggc tatatgccaa tacactgtcc ttcagagact 900

gacacggact ctgtattttt acaggatggg ttctcattta ttatttacaa attcacatat 960

acaacaccac cgtccccagt gcccgcagtt tttattaaac ataacgtggg atctccacgc 1020

gaatctcggg tacgtgttcc ggacatgggt tcttctccgg tagcggcgga gcttctacat 1080

ccgagccctg ctcccatgcc tccagcgact catggtcgct cggcagctcc ttgctcctaa 1140

cagtggaggc cagacttagg cacagcacga tgcccaccac caccagtgtg ccgcacaagg 1200

ccgtggcggt agggtatgtg tctgaaaatg agctcgggga gcgggcttgc accgctgacg 1260

catttgaaag acttaaggca gcggcagaag aagatgcagg cagctgagtt gttgtgttct 1320

gataagagtc agaggtaact cccgttgcgg tgctgttaac ggtggagggc agtgtagtct 1380

gagcagtact cgttgctgcc gcgcgcgcca ccagacataa tagctgacag actaacagaa 1440

gcctctgcta accatgttca tgccttcttc tttttcctac agctcctggg caacgtgctg 1500

gtagcttcct tcttcttttt cctagaagct cagaataaac gctcaacttt ggccgccacc 1560

<210> 483
<211> 1021
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 483
ccaacattac cgccatgttg acattgatta ttgactagtt attaatagta atcaattacg 60

gggtcattag ttcatagccc atatatggag ttccgcgtta cataacttac ggtaaatggc 120

ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac gtatgttccc 180

atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt acggtaaact 240

gcccacttgg cagtacatca agtgtatcat atgccaagta cgcccccctat tgacgtcaat 300

gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttatggga ctttcctact 360

tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt ttggcagtac 420

atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca ccccattgac 480

gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg tcgtaacaac 540

tccgccccat tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta tataagcaga 600

gctcgtttag tgaaccgtca gatcgcctgg agactccatc cacgctgttt tgacctccat 660

agaagatacc gggaccgatc cagcctccgc ggccgggaac ggtgcattgg aacgcggatt 720

ccccgtgcca agagtgaccc tggcagaact cggtaagtct gttgacatgt atgtgatgta 780

tactaacctg catgggacgt ggatttactt gtgtatgtca gatagagtaa agattaactc 840

ttgcatgtga gcggggcatc gagatagcga taaatgagtc aggaggacgg agcctctgct 900

aaccatgttc atgccttctt ctttttccta cagctcctgg gcaacgtgct ggttattgtg 960

ctgtctcatc attttggcaa agaatttcac cgtccttgac acgaagtttg ctgccgccac 1020

c 1021

<210> 484
<211> 1582
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 484
ccaacattac cgccatgttg acttcaatgt ctatatatgg agatccgcat attgacgtca 60

atatcggtaa atggcccact tggctgaccg ccccacgacc cccgcccatt gacgtcaatg 120

gtgggacttt ccattgacgt caatgggcgg ggaacggata tgagccatag aatgtactgc 180

caagtgggcc atttaccgtt caccacgccc ctattgacgt caatgacggt aaatggcccg 240

cctggctgta cgccaattgc atcatcctat tgtttttcta tgggaatttc cctattggca 300

gtacatcaac gtattactaa tggggatttc caatgactaa tacaacgggc agtacgccca 360

gtacgtatga ctaatgggac tttccataat cccgccccat tgacgtcaat gggcatccgt 420

tctggcacca aaatgaatgg gaatttccaa tatgagtcat aaaccccgcc ccattgacgc 480

acattacacg tcaatgggcg gtaggcgtgc cctatgggcg gtctatataa gcagagcccg 540

tttagtgaac cgtcacttcg cttggagcca ccgtccacgc tgtttggagc tccatagaag 600

gaaccgggac ccagccagcc tccgtagccg ggaacggtgc attggaacgc ggatacagcg 660

tgccaatagt gacgtaagta ctgcctatag atataggcgt ggctatatac tatctatagc 720

atgctatgca ttatcttggc tttggaccag ggcgcttccg cttactcata ctatagggtg 780

atggtatagc ttaacatata ggtggagcta ttgattggga ctgccccta ttggtgacgg 840

tgtttcctat atctgatcaa tactatggcc ctctgccatg ccgcccctct tggcctatag 900

ccaatctatc ggtgtcggac tctgcttaga ccccctttcc aactcccaga gactgacacg 960

cggactctgt ttgtttttaa ggatggctct tttattctta gaccccacaa acaccgtccg 1020

gggctaacag gggatctcca cggcgatctc gggtaccccc ggccacggga gtgtggttag 1080

tctgtcctcc tccggctcct cgggccaggt ccccagcagc tcttcttgtt cttcatcgtc 1140

gctgggcacc tctcggctgc taattgtcga ggccagactc aggcagatca cgatccccac 1200

cactattacc atgccgccca gggccgaggc tgtggggtat gcctctaaca acgagcccgg 1260

ggaccctaca tgggtccacg gactctctgc tgtctggaga cttaaggcca gggaagaaga 1320

gacagatgat gaagtccctg acagctgaga agaaaaggta agggagctcg ttactcccgt 1380

ggtgttgtga tagttaacag cggtggaggg cagtgtagtc tgagcagtac tcgttgctgc 1440

cgcgcgcgcc accagacata atagctgaca gactaacaga agcctctgct aaccatgttc 1500

atgccttctt ctttttccta cagctcctgg gcaacgtgct ggttattgtg ctgtctcatc 1560

attttggcaa agaattgcca cc 1582

<210> 485
<211> 1669
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 485
ccaacattac cgccatgttg acattgatta ttgactagtt attaatagta atcaattacg 60

gggtcattag ttcatagccc atatatggag ttccgcgtta cataacttac ggtaaatggc 120

ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac gtatgttccc 180

atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt acggtaaact 240

gcccacttgg cagtacatca agtgtatcat atgccaagta cgcccccta tgacgtcaat 300

gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttatggga ctttcctact 360

tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt ttggcagtac 420

atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca ccccattgac 480

gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg tcgtaacaac 540

tccgccccat tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta tataagcaga 600

gctcgtttag tgaaccgtca gatcgcctgg agactccatt cacttcgctt ggagccaccg 660

tccacgctgt ttggagctcc atagaaggaa ccgggaccca gccagcctcc gtagccggga 720

acggtgcatt ggaacgcgga tacagcgtgc caatagtgac gtaagtactg cctatagata 780

taggcgtggc tatatactat ctatagcatg ctatgcatta tcttggcttt ggaccagggc 840

gcttccgctt actcatacta tagggtgatg gtatagctta acatataggt ggagctattg 900

attgggactg ccccctattg gtgacggtgt ttcctatatc tgatcaatac tatggccctc 960

tgccatgccg cccctcttgg cctatagcca atctatcggt gtcggactct gcttagaccc 1020

cctttccaac tcccagagac tgacacgcgg actctgtttg tttttaagga tggctctttt 1080

attcttagac cccacaaaca ccgtccgggg ctaacagggg atctccacgg cgatctcggg 1140

taccccggc cacgggagtg tggttagtct gtcctcctcc ggctcctcgg gccaggtccc 1200

cagcagctct tcttgttctt catcgtcgct gggcacctct cggctgctaa ttgtcgaggc 1260

cagactcagg cagatcacga tccccaccac tattaccatg ccgcccaggg ccgaggctgt 1320

ggggtatgcc tctaacaacg agcccgggga ccctacatgg gtccacggac tctctgctgt 1380

ctggagactt aaggccaggg aagaagagac agatgatgaa gtccctgaca gctgagaaga 1440

aaaggtaagg gagctcgtta ctcccgtggt gttgtgatag ttaacagcgg tggagggcag 1500

tgtagtctga gcagtactcg ttgctgccgc gcgcgccacc agacataata gctgacagac 1560

taacagaagc ctctgctaac catgttcatg ccttcttctt tttcctacag ctcctgggca 1620

acgtgctggt tattgtgctg tctcatcatt ttggcaaaga attgccacc 1669

<210> 486
<211> 1088

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 486
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccatgc tgatgcggtt ttggcagtac accaatgggc gtggatagcg gtttgactca 360

cggggatttc caagtctcca ccccattgac gtcaatggga gtttgttttg gcaccaaaat 420

caacgggact ttccaaaatg tcgtaataac cccgccccgt tgacgcaaat gggcggtagg 480

cgtgtacggt gggaggtcta tataagcaga gctcgtttag tgaaccgtca gatcctcact 540

cactctcttc cgcatcgctg tctgcgaggg ccagctgttg ggctcgcggt tgaggacaaa 600

ctcttcgcgg tctttccagt actcttggat cggaaacccg tcggcctccg aacggtactc 660

cgccaccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc tcgagaaagg 720

cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc agcgggtggc 780

ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag gcggtcttga 840

gactgcggat ggtcgaggtg aggtgtggca ggcttgagat ccagctgttg gggtgagtac 900

tccctctcaa aagcgggcat tacttctgcg ctaagattgt cagtttccaa aaacgaggag 960

gatttgatat tcacctggcc cgatctggcc atacacttga gtgacaatga catccacttt 1020

gcctttctct ccacaggtgt ccactcccag cgtctcaggg gacacccaag ctgtctagag 1080

ccgccacc 1088

<210> 487
<211> 878
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 487
ccaacattac cgccatgttg acttcaatgt ctatatatgg agatccgcat attgacgtca 60

atatcggtaa atggcccact tggctgaccg ccccacgacc cccgcccatt gacgtcaatg 120

gtgggacttt ccattgacgt caatgggcgg ggaacggata tgagccatag aatgtactgc 180

caagtgggcc atttaccgtt caccacgccc ctattgacgt caatgacggt aaatggcccg 240

cctggctgta cgccaattgc atcatcctat tgtttttcta tgggaatttc cctattggca 300

gtacatcaac gtattactaa tggggatttc caatgactaa tacaacgggc agtacgccca 360

gtacgtatga ctaatgggac tttccataat cccgccccat tgacgtcaat gggcatccgt 420

tctggcacca aaatgaatgg gaatttccaa tatgagtcat aaaccccgcc ccattgacgc 480

acattacacg tcaatgggcg gtaggcgtgc cctatgggcg gtctatataa gcagagcccg 540

tttagtgaac cgtcacttcg cttggagcca ccgtccacgc tgtttggagc tccatagaag 600

gaaccgggaa cctgaagtcc tttgaagata tcaccaagga gtgtgataag aaccccggga 660

aggacattct gcaagaactt ggtgagtagg catgatgttc tgtgtcttgc taaccacaca 720

gtctctgcat gtgaaaagag atgataggat gagcttatta acctcggggt ggttcatgca 780

tgtgtcaggc tgggggtgga gagacagctg tggaacttag tgactcatga cagctatctc 840

tgttatcctc cacagttaag cagattaagg ccgccacc   878

<210> 488
<211> 930
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 488
ccaacattac cgccatgttg acattgatta ttgactagtt attaatagta atcaattacg 60

gggtcattag ttcatagccc atatatggag ttccgcgtta cataacttac ggtaaatggc 120

ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac gtatgttccc 180

atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt acggtaaact 240

gcccacttgg cagtacatca agtgtatcat atgccaagta cgcccctat tgacgtcaat 300

gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttatggga ctttcctact 360

tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt ttggcagtac 420

atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca ccccattgac 480

gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg tcgtaacaac 540

tccgccccat tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta tataagcaga 600

gctcgtttag tgaaccgtca gatcgcctgg agactccata gctccataga aggaaccggg 660

aacctgaagt cctttgaaga tatcaccaag gagtgtgata agaaccccgg gaaggacatt 720

ctgcaagaac ttggtgagta ggcatgatgt tctgtgtctt gctaaccaca cagtctctgc 780

atgtgaaaag agatgatagg atgagcttat taacctcggg gtggttcatg catgtgtcag 840

gctgggggtg gagagacagc tgtggaactt agtgactcat gacagctatc tctgttatcc 900

tccacagtta agcagattaa ggccgccacc 930

<210> 489
<211> 895
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 489
gaattcgttt atcggccacc gaggccaaga tctggccgcc aattgattat tgactagtta 60

ttaatagtaa tcaattacgg ggtcattagt tcatagccca tatatggagt tccgcgttac 120

ataacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc cattgacgtc 180

aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt 240

ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtcc 300

gccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc agtacatgac 360

cttacgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta ttaccatggt 420

gatgcggttt tggcagtaca ccaatgggcg tggatagcgg tttgactcac ggggatttcc 480

aagtctccac cccattgacg tcaatgggag tttgttttgg caccaaaatc aacgggactt 540

tccaaaatgt cgtaataacc ccgccccgtt gacgcaaatg ggcggtaggc gtgtacggtg 600

ggaggtctat ataagcagag ctcgtttagt gaaccgtcag atcgcctgga gactccatat 660

cgccgatcag gcatccgtca acgcccacgg ccgtcacttg gataagaacc gtgtctaccc 720

atcagacaag taagtttctg tttccatttc ctctcttgtg acacatttca tgactctgca 780

tttacataac ccctgactca tggtcttccc actcttgttc tctcagggtg ccagctcagc 840

ttccttcttc tttttcctag aagctcagaa taaacgctca actttggccg ccacc 895

<210> 490
<211> 623
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 490
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcgtct caggggacac 600

ccaagctgtc tagagccgcc acc 623

<210> 491
<211> 1695
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 491
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtacgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

atgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatggtcga 300

ggtgagcccc acgttctgct tcactctccc catctccccc ccctccccac ccccaatttt 360

gtatttattt atttttaat tattttgtgc agcgatgggg gcgggggggg gggggcgcg 420

cgccaggcgg ggcggggcgg ggcgaggggc ggggcggggc gaggcggaga ggtgcggcgg 480

cagccaatca gagcggcgcg ctccgaaagt ttccttttat ggcgaggcgg cggcggcggc 540

ggccctataa aaagcgaagc gcgcggcggg cgggagtcgc tgcgcgctgc cttcgccccg 600

tgccccgctc cgccgccgcc tcgcgccgcc cgccccggct ctgactgacc gcgttactcc 660

cacaggtgag cgggcgggac ggcccttctc ctccgggctg taattagcgc ttggtttaat 720

gacggcttgt ttcttttctg tggctgcgtg aaagccttga ggggctccgg gagggccctt 780

tgtgcggggg gagcggctcg gggggtgcgt gcgtgtgtgt gtgcgtgggg agcgccgcgt 840

gcggctccgc gctgcccggc ggctgtgagc gctgcgggcg cggcgcgggg ctttgtgcgc 900

tccgcagtgt gcgcgagggg agcgcggccg ggggcggtgc cccgcggtgc gggggggggct 960

gcgaggggaa caaaggctgc gtgcggggtg tgtgcgtggg ggggtgagca gggggtgtgg 1020

gcgcgtcggt cgggctgcaa ccccccctgc acccccctcc ccgagttgct gagcacggcc 1080

cggcttcggg tgcggggctc cgtacggggc gtggcgcggg gctcgccgtg ccgggcgggg 1140

ggtggcggca ggtgggggtg ccgggcgggg cggggccgcc tcgggccggg gagggctcgg 1200

gggaggggcg cggcggcccc cggagcgccg gcggctgtcg aggcgcggcg agccgcagcc 1260

attgcctttt atggtaatcg tgcgagaggg cgcagggact tcctttgtcc caaatctgtg 1320

cggagccgaa atctgggagg cgccgccgca ccccctctag cgggcgcggg gcgaagcggt 1380

gcggcgccgg caggaaggaa atgggcgggg agggccttcg tgcgtcgccg cgccgccgtc 1440

cccttctccc tctccagcct cggggctgtc cgcgggggga cggctgcctt cgggggggac 1500

ggggcagggc ggggttcggc ttctggcgtg tgaccggcgg ctctagagcc tctgctaacc 1560

atgttcatgc cttcttcttt ttcctacagc tcctgggcaa cgtgctggtt attgtgctgt 1620

ctcatcattt tggcaaagaa ttcggcttga tcgaagccgt ctcaggggac acccaagctg 1680

tctagagccg ccacc 1695

<210> 492
<211> 870
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 492
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgaccctggc agaactcggt aagtctgttg 660

acatgtatgt gatgtatact aacctgcatg ggacgtggat ttacttgtgt atgtcagata 720

gagtaaagat taactcttgc atgtgagcgg ggcatcgaga tagcgataaa tgagtcagga 780

ggacggatac ttatatgtgt tgttatcctc ctctacagtc aaacagatta agcgtctcag 840

gggacaccca agctgtctag agccgccacc 870

<210> 493
<211> 1937
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 493
actacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 60

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 120

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 180

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 240

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac caatgacgtc 300

gaggagaagt tccccaactt tcccgcctct cagcctttga aagaaagaaa ggggaggggg 360

caggccgcgt gcagccgcga gcggtgctgg gctccggctc caattcccca tctcagtcgt 420

tcccaaagtc ctcctgtttc atccaagcgt gtaagggtcc ccgtccttga ctccctagtg 480

tcctgctgcc cacagtccag tcctgggaac cagcaccgat cacctcccat cgggccaatc 540

tcagtccctt ccccctacg tcggggccca cacgctcggt gcgtgcccag ttgaaccagg 600

cggctgcgga aaaaaaaaag cggggagaaa gtagggcccg gctactagcg gttttacggg 660

cgcacgtagc tcaggcctca agaccttggg ctgggactgg ctgagcctgg cgggaggcgg 720

ggtccgagtc accgcctgcc gccgcgcccc cggtttctat aaattgagcc cgcagcctcc 780

cgcttcgctc tctgctcctc ctgttcgaca gtcaggagtc gctgcgcgct gccttcgccc 840

cgtgccccgc tccgccgccg cctcgcgccg cccgccccgg ctctgactga ccgcgttact 900

cccacaggtg agcgggcggg acggcccttc tcctccgggc tgtaattagc gcttggttta 960

atgacggctt gtttcttttc tgtggctgcg tgaaagcctt gaggggctcc gggagggccc 1020

tttgtgcggg gggagcggct cgggggggtgc gtgcgtgtgt gtgtgcgtgg ggagcgccgc 1080

gtgcggctcc gcgctgcccg gcggctgtga gcgctgcggg cgcggcgcgg ggctttgtgc 1140

gctccgcagt gtgcgcgagg ggagcgcggc cgggggcggt gccccgcggt gcgggggggg 1200

ctgcgagggg aacaaaggct gcgtgcgggg tgtgtgcgtg gggggggtgag caggggggtgt 1260

gggcgcgtcg gtcgggctgc aacccccccct gcacccccct ccccgagttg ctgagcacgg 1320

cccggcttcg ggtgcggggc tccgtacggg gcgtggcgcg gggctcgccg tgccgggcgg 1380

ggggtggcgc caggtggggg tgccgggcgg ggcggggccg cctcgggccg gggagggctc 1440

gggggagggg cgcggcggcc cccggagcgc cggcggctgt cgaggcgcgg cgagccgcag 1500

ccattgcctt ttatggtaat cgtgcgagag ggcgcaggga cttcctttgt cccaaatctg 1560

tgcggagccg aaatctggga ggcgccgccg cacccccctct agcgggcgcg gggcgaagcg 1620

gtgcggcgcc ggcaggaagg aaatgggcgg ggagggcctt cgtgcgtcgc cgcgccgccg 1680

tccccttctc cctctccagc ctcggggctg tccgcggggg gacggctgcc ttcgggggggg 1740

acggggcagg gcggggttcg gcttctggcg tgtgaccggc ggctctagag cctctgctaa 1800

ccatgttcat gccttcttct ttttcctaca gctcctgggc aacgtgctgg ttattgtgct 1860

gtctcatcat tttggcaaag aattcggctt gatcgaagcc gtctcagggg acacccaagc 1920

tgtctagagc cgccacc 1937

<210> 494
<211> 1516
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 494
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgacgtaagt accgcctata gagtctatag 660

gcccaccccc ttggcttctt atgcatgcta tactgttttt ggcttggggt ctatacaccc 720

ccgcttcctc atgttatagg tgatggtata gcttagccta taggtgtggg ttattgacca 780

ttattgacca ctcccctatt ggtgacgata ctttccatta ctaatccata acatggctct 840

ttgccacaac tctctttatt ggctatatgc caatacactg tccttcagag actgacacgg 900

actctgtatt tttacaggat gggttctcat ttattattta caaattcaca tatacaacac 960

caccgtcccc agtgcccgca gtttttatta aacataacgt gggatctcca cgcgaatctc 1020

gggtacgtgt tccggacatg ggttcttctc cggtagcggc ggagcttcta catccgagcc 1080

ctgctcccat gcctccagcg actcatggtc gctcggcagc tccttgctcc taacagtgga 1140

ggccagactt aggcacagca cgatgcccac caccaccagt gtgccgcaca aggccgtggc 1200

ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct tgcaccgctg acgcatttga 1260

aagacttaag gcagcggcag aagaagatgc aggcagctga gttgttgtgt tctgataaga 1320

gtcagaggta actcccgttg cggtgctgtt aacggtggag ggcagtgtag tctgagcagt 1380

actcgttgct gccgcgcgcg ccaccagaca taatagctga cagactaaca gactgttcct 1440

ttccatgggt cttttctgca gtcaccgtcc ttgacacgcg tctcagggga cacccaagct 1500

gtctagagcc gccacc 1516

<210> 495
<211> 1516
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 495
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgacgtaagt accgcctata gagtctatag 660

gcccaccccc ttggcttctt atgcatgcta tactgttttt ggcttggggt ctatacaccc 720

ccgcttcctc atgttatagg tgatggtata gcttagccta taggtgtggg ttattgacca 780

ttattgacca ctcccctatt ggtgacgata ctttccatta ctaatccata acatggctct 840

ttgccacaac tctctttatt ggctatatgc caatacactg tccttcagag actgacacgg 900

actctgtatt tttacaggat gggttctcat ttattattta caaattcaca tatacaacac 960

caccgtcccc agtgcccgca gtttttatta aacataacgt gggatctcca cgcgaatctc 1020

gggtacgtgt tccggacatg ggttcttctc cggtagcggc ggagcttcta catccgagcc 1080

ctgctcccat gcctccagcg actcatggtc gctcggcagc tccttgctcc taacagtgga 1140

ggccagactt aggcacagca cgatgcccac caccaccagt gtgccgcaca aggccgtggc 1200

ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct tgcaccgctg acgcatttga 1260

aagacttaag gcagcggcag aagaagatgc aggcagctga gttgttgtgt tctgataaga 1320

gtcagaggta actcccgttg cggtgctgtt aacggtggag ggcagtgtag tctgagcagt 1380

actcgttgct gccgcgcgcg ccaccagaca taatagctga cagactaaca gactgttcct 1440

ttccatgggt cttttctgca gtcaccgtcc ttgacacgcg tctcagggga cacccaagct 1500

gtctagagcc gccacc 1516

<210> 496
<211> 1133
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 496
actacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 60

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 120

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 180

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 240

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac caatgacgtc 300

gaggagaagt tccccaactt tcccgcctct cagcctttga aagaaagaaa ggggaggggg 360

caggccgcgt gcagccgcga gcggtgctgg gctccggctc caattcccca tctcagtcgt 420

tcccaaagtc ctcctgtttc atccaagcgt gtaagggtcc ccgtccttga ctccctagtg 480

tcctgctgcc cacagtccag tcctgggaac cagcaccgat cacctcccat cgggccaatc 540

tcagtccctt ccccctacg tcggggccca cacgctcggt gcgtgcccag ttgaaccagg 600

cggctgcgga aaaaaaaaag cggggagaaa gtagggcccg gctactagcg gttttacggg 660

cgcacgtagc tcaggcctca agaccttggg ctgggactgg ctgagcctgg cgggaggcgg 720

ggtccgagtc accgcctgcc gccgcgcccc cggtttctat aaattgagcc cgcagcctcc 780

cgcttcgctc tctgctcctc ctgttcgaca gtcagccgca tcttcttttg cgtcgccagg 840

taaagacggg cggagagaaa cccgggaggc tagggacggc ctgaaggcgg caggggcggg 900

cgcaggccgg atgtgttcgc gccgctgcgg ggtgggcccg ggcggcctcc gcattgcagg 960

ggcgggcgga ggacgtgatg cggcgcgggc tgggcatgga ggcctggtgg gggaggggag 1020

gggaggcgtg tgtgtcggcc ggggccacta ggcgctcact gttctctccc tccgcgcagc 1080

cgagccacat cgctccgtct caggggacac ccaagctgtc tagagccgcc acc 1133

<210> 497
<211> 534
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 497
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccagcacatc 300

gcccacagtc cccgagaagt tgggggggagg ggtcggcaat tgaaccggtg cctagagaag 360

gtggcgcggg gtaaactggg aaagtgatgt cgtgtactgg ctccgccttt ttcccgaggg 420

tgggggagaa ccgtatataa gtgcagtagt cgccgtgaac gttcttttc gcaacgggtt 480

tgccgccaga acacagcgtc tcaggggaca cccaagctgt ctagagccgc cacc 534

<210> 498
<211> 1516
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 498
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgacgtaagt accgcctata gagtctatag 660

gcccaccccc ttggcttctt atgcatgcta tactgttttt ggcttggggt ctatacaccc 720

ccgcttcctc atgttatagg tgatggtata gcttagccta taggtgtggg ttattgacca 780

ttattgacca ctcccctatt ggtgacgata ctttccatta ctaatccata acatggctct 840

ttgccacaac tctctttatt ggctatatgc caatacactg tccttcagag actgacacgg 900

actctgtatt tttacaggat gggttctcat ttattattta caaattcaca tatacaacac 960

caccgtcccc agtgcccgca gtttttatta aacataacgt gggatctcca cgcgaatctc 1020

gggtacgtgt tccggacatg ggttcttctc cggtagcggc ggagcttcta catccgagcc 1080

ctgctcccat gcctccagcg actcatggtc gctcggcagc tccttgctcc taacagtgga 1140

ggccagactt aggcacagca cgatgcccac caccaccagt gtgccgcaca aggccgtggc 1200

ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct tgcaccgctg acgcatttga 1260

aagacttaag gcagcggcag aagaagatgc aggcagctga gttgttgtgt tctgataaga 1320

gtcagaggta actcccgttg cggtgctgtt aacggtggag ggcagtgtag tctgagcagt 1380

actcgttgct gccgcgcgcg ccaccagaca taatagctga cagactaaca gactgttcct 1440

ttccatgggt cttttctgca gtcaccgtcc ttgacacgcg tctcagggga cacccaagct 1500

gtctagagcc gccacc 1516

<210> 499
<211> 878
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 499
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaatgacgt 300

cgaggagaag ttccccaact ttcccgcctc tcagcctttg aaagaaagaa aggggagggg 360

gcaggccgcg tgcagccgcg agcggtgctg ggctccggct ccaattcccc atctcagtcg 420

ttcccaaagt cctcctgttt catccaagcg tgtaagggtc cccgtccttg actccctagt 480

gtcctgctgc ccacagtcca gtcctgggaa ccagcaccga tcacctccca tcgggccaat 540

ctcagtccct tccccctac gtcggggccc acacgctcgg tgcgtgccca gttgaaccag 600

gcggctgcgg aaaaaaaaaa gcggggagaa agtagggccc ggctactagc ggttttacgg 660

gcgcacgtag ctcaggcctc aagaccttgg gctgggactg gctgagcctg gcgggaggcg 720

gggtccgagt caccgcctgc cgccgcgccc ccggtttcta taaattgagc ccgcagcctc 780

ccgcttcgct ctctgctcct cctgttcgac agtcagccgc atcttctttt gcgtcgccag 840

cgtctcaggg gacacccaag ctgtctagag ccgccacc 878

<210> 500
<211> 1489
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 500
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccagcacatc 300

gcccacagtc cccgagaagt tgggggggagg ggtcggcaat tgaaccggtg cctagagaag 360

gtggcgcggg gtaaactggg aaagtgatgt cgtgtactgg ctccgccttt ttcccgaggg 420

tgggggagaa ccgtatataa gtgcagtagt cgccgtgaac gttcttttc gcaacgggtt 480

tgccgccaga acacaggtaa gtgccgtgtg tggttcccgc gggcctggcc tctttacggg 540

ttatggccct tgcgtgcctt gaattacttc cacgcccctg gctgcagtac gtgattcttg 600

atcccgagct tcgggttgga agtgggtggg agagttcgag gccttgcgct taaggagccc 660

cttcgcctcg tgcttgagtt gaggcctggc ctgggcgctg gggccgccgc gtgcgaatct 720

ggtggcacct tcgcgcctgt ctcgctgctt tcgataagtc tctagccatt taaaattttt 780

gatgacgtgc tgcgacgctt tttttctggc aagatagtct tgtaaatgcg ggccaggatc 840

tgcacactgg tatttcggtt tttgggcccg cggccggcga cggggcccgt gcgtcccagc 900

gcacatgttc ggcgaggcgg ggcctgcgag cgcggccacc gagaatcgga cgggggtagt 960

ctcaagctgg ccggcctgct ctggtgcctg gcctcgcgcc gccgtgtatc gccccgccct 1020

gggcggcaag gctggcccgg tcggcaccag ttgcgtgagc ggaaagatgg ccgcttcccg 1080

gccctgctcc agggggctca aaatggagga cgcggcgctc gggagagcgg gcgggtgagt 1140

cacccacaca aaggaaaagg gcctttccgt cctcagccgt cgcttcatgt gactccacgg 1200

agtaccgggc gccgtccagg cacctcgatt agttctggag cttttggagt acgtcgtctt 1260

taggttgggg ggaggggttt tatgcgatgg agtttcccca cactgagtgg gtggagactg 1320

aagttaggcc agcttggcac ttgatgtaat tctccttgga atttggcctt tttgagtttg 1380

gatcttggtt cattctcaag cctcagacag tggttcaaag ttttttttctt ccatttcagg 1440

tgtcgtgaac acgtctcagg ggacacccaa gctgtctaga gccgccacc 1489

<210> 501
<211> 1516
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 501
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgacgtaagt accgcctata gagtctatag 660

gcccaccccc ttggcttctt atgcatgcta tactgttttt ggcttggggt ctatacaccc 720

ccgcttcctc atgttatagg tgatggtata gcttagccta taggtgtggg ttattgacca 780

ttattgacca ctcccctatt ggtgacgata ctttccatta ctaatccata acatggctct 840

ttgccacaac tctctttatt ggctatatgc caatacactg tccttcagag actgacacgg 900

actctgtatt tttacaggat gggttctcat ttattattta caaattcaca tatacaacac 960

caccgtcccc agtgcccgca gtttttatta aacataacgt gggatctcca cgcgaatctc 1020

gggtacgtgt tccggacatg ggttcttctc cggtagcggc ggagcttcta catccgagcc 1080

ctgctcccat gcctccagcg actcatggtc gctcggcagc tccttgctcc taacagtgga 1140

ggccagactt aggcacagca cgatgcccac caccaccagt gtgccgcaca aggccgtggc 1200

ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct tgcaccgctg acgcatttga 1260

aagacttaag gcagcggcag aagaagatgc aggcagctga gttgttgtgt tctgataaga 1320

gtcagaggta actcccgttg cggtgctgtt aacggtggag ggcagtgtag tctgagcagt 1380

actcgttgct gccgcgcgcg ccaccagaca taatagctga cagactaaca gactgttcct 1440

ttccatgggt cttttctgca gtcaccgtcc ttgacacgcg tctcagggga cacccaagct 1500

gtctagagcc gccacc 1516

<210> 502
<211> 1516
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 502
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgacgtaagt accgcctata gagtctatag 660

gcccaccccc ttggcttctt atgcatgcta tactgttttt ggcttggggt ctatacaccc 720

ccgcttcctc atgttatagg tgatggtata gcttagccta taggtgtggg ttattgacca 780

ttattgacca ctcccctatt ggtgacgata ctttccatta ctaatccata acatggctct 840

ttgccacaac tctctttatt ggctatatgc caatacactg tccttcagag actgacacgg 900

actctgtatt tttacaggat gggttctcat ttattattta caaattcaca tatacaacac 960

caccgtcccc agtgcccgca gtttttatta aacataacgt gggatctcca cgcgaatctc 1020

gggtacgtgt tccggacatg ggttcttctc cggtagcggc ggagcttcta catccgagcc 1080

ctgctcccat gcctccagcg actcatggtc gctcggcagc tccttgctcc taacagtgga 1140

ggccagactt aggcacagca cgatgcccac caccaccagt gtgccgcaca aggccgtggc 1200

ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct tgcaccgctg acgcatttga 1260

aagacttaag gcagcggcag aagaagatgc aggcagctga gttgttgtgt tctgataaga 1320

gtcagaggta actcccgttg cggtgctgtt aacggtggag ggcagtgtag tctgagcagt 1380

actcgttgct gccgcgcgcg ccaccagaca taatagctga cagactaaca gactgttcct 1440

ttccatgggt cttttctgca gtcaccgtcc ttgacacgcg tctcagggga cacccaagct 1500

gtctagagcc gccacc 1516

<210> 503
<211> 558
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 503
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc cgtctcaggg gacacccaag 540

ctgtctagag ccgccacc 558

<210> 504
<211> 1133
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 504
actacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata 60

atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag 120

tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc aagtacgccc 180

cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta 240

tgggactttc ctacttggca gtacatctac gtattagtca tcgctattac caatgacgtc 300

gaggagaagt tccccaactt tcccgcctct cagcctttga aagaaagaaa ggggaggggg 360

caggccgcgt gcagccgcga gcggtgctgg gctccggctc caattcccca tctcagtcgt 420

tcccaaagtc ctcctgtttc atccaagcgt gtaagggtcc ccgtccttga ctccctagtg 480

tcctgctgcc cacagtccag tcctgggaac cagcaccgat cacctcccat cgggccaatc 540

tcagtccctt ccccctacg tcggggccca cacgctcggt gcgtgcccag ttgaaccagg 600

cggctgcgga aaaaaaaaag cggggagaaa gtagggcccg gctactagcg gttttacggg 660

cgcacgtagc tcaggcctca agaccttggg ctgggactgg ctgagcctgg cgggaggcgg 720

ggtccgagtc accgcctgcc gccgcgcccc cggtttctat aaattgagcc cgcagcctcc 780

cgcttcgctc tctgctcctc ctgttcgaca gtcagccgca tcttcttttg cgtcgccagg 840

taaagacggg cggagagaaa cccgggaggc tagggacggc ctgaaggcgg caggggcggg 900

cgcaggccgg atgtgttcgc gccgctgcgg ggtgggcccg ggcggcctcc gcattgcagg 960

ggcgggcgga ggacgtgatg cggcgcgggc tgggcatgga ggcctggtgg gggaggggag 1020

gggaggcgtg tgtgtcggcc ggggccacta ggcgctcact gttctctccc tccgcgcagc 1080

cgagccacat cgctccgtct caggggacac ccaagctgtc tagagccgcc acc 1133

<210> 505
<211> 361

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 505
ggtgtggaaa gtccccaggc tccccagcag gcagaagtat gcaaagcatg catctcaatt 60

agtcagcaac caggtgtgga aagtccccag gctccccagc aggcagaagt atgcaaagca 120

tgcatctcaa ttagtcagca accatagtcc cgcccctaac tccgcccatc ccgcccctaa 180

ctccgcccag ttccgcccat tctccgcccc atcgctgact aatttttttt atttatgcag 240

aggccgaggc cgcctcggcc tctgagctat tccagaagta gtgaggaggc ttttttggag 300

gcctaggctt ttgcaaaaag cttcgtctca ggggacaccc aagctgtcta gagccgccac 360

c 361

<210> 506
<211> 1469
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 506
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccagcacatc 300

gcccacagtc cccgagaagt tgggggggagg ggtcggcaat tgaaccggtg cctagagaag 360

gtggcgcggg gtaaactggg aaagtgatgt cgtgtactgg ctccgccttt ttcccgaggg 420

tgggggagaa ccgtatataa gtgcagtagt cgccgtgaac gttcttttc gcaacgggtt 480

tgccgccaga acacaggtaa gtgccgtgtg tggttcccgc gggcctggcc tctttacggg 540

ttatggccct tgcgtgcctt gaattacttc cacctggctc cagtacgtga ttcttgatcc 600

cgagctggag ccaggggcgg gccttgcgct ttaggagccc cttcgcctcg tgcttgagtt 660

gaggcctggc ctgggcgctg gggccgccgc gtgcgaatct ggtggcacct tcgcgcctgt 720

ctcgctgctt tcgataagtc tctagccatt taaaattttt gatgacgtgc tgcgacgctt 780

tttttctggc aagatagtct tgtaaatgcg ggccaggatc tgcacactgg tatttcggtt 840

tttgggcccg cggccggcga cggggcccgt gcgtcccagc gcacatgttc ggcgaggcgg 900

ggcctgcgag cgcggccacc gagaatcgga cgggggtagt ctcaagctgg ccggcctgct 960

ctggtgcctg gcctcgcgcc gccgtgtatc gccccgccct gggcggcaag gctggcccgg 1020

tcggcaccag ttgcgtgagc ggaaagatgg ccgcttcccg gccctgctcc agggggctca 1080

aaatggagga cgcggcgctc gggagagcgg gcgggtgagt cacccacaca aaggaaaagg 1140

gcctttccgt cctcagccgt cgcttcatgt gactccacgg agtaccgggc gccgtccagg 1200

cacctcgatt agttctggag cttttggagt acgtcgtctt taggttgggg ggaggggttt 1260

tatgcgatgg agtttcccca cactgagtgg gtggagactg aagttaggcc agcttggcac 1320

ttgatgtaat tctccttgga atttggcctt tttgagtttg gatcttggtt cattctcaag 1380

cctcagacag tggttcaaag ttttttttctt ccatttcagg tgtcctgaac acgtctcagg 1440

ggacacccaa gctgtctaga gccgccacc 1469

<210> 507
<211> 1062
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 507
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatggtgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc ctcactctct tccgcatcgc 540

tgtctgcgag ggccagctgt tgggctcgcg gttgaggaca aactcttcgc ggtctttcca 600

gtactcttgg atcggaaacc cgtcggcctc cgaacggtac tccgccaccg agggacctga 660

gcgagtccgc atcgaccgga tcggaaaacc tctcgagaaa ggcgtctaac cagtcacagt 720

cgcaaggtag gctgagcacc gtggcgggcg gcagcgggtg gcggtcgggg ttgtttctgg 780

cggaggtgct gctgatgatg taattaaagt aggcggtctt gagacggcgg atggtcgagg 840

tgaggtgtgg caggcttgag atccagctgt tggggtgagt actccctctc aaaagcgggc 900

attacttctg cgctaagatt gtcagtttcc aaaaacgagg aggatttgat attcacctgg 960

cccgatctgg ccatacactt gagtgacaat gacatccact ttgcctttct ctccacaggt 1020

gtccactccc aggggacacc caagctgtct agagccgcca cc 1062

<210> 508
<211> 1516
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 508
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatgctgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc gcctggagag gccatccacg 540

ctgttttgac ctccatagtg gacaccggga ccgatccagc ctccgcggcc gggaacggtg 600

cattggaacg cggattcccc gtgccaagag tgacgtaagt accgcctata gagtctatag 660

gcccaccccc ttggcttctt atgcatgcta tactgttttt ggcttggggt ctatacaccc 720

ccgcttcctc atgttatagg tgatggtata gcttagccta taggtgtggg ttattgacca 780

ttattgacca ctcccctatt ggtgacgata ctttccatta ctaatccata acatggctct 840

ttgccacaac tctctttatt ggctatatgc caatacactg tccttcagag actgacacgg 900

actctgtatt tttacaggat gggttctcat ttattattta caaattcaca tatacaacac 960

caccgtcccc agtgcccgca gtttttatta aacataacgt gggatctcca cgcgaatctc 1020

gggtacgtgt tccggacatg ggttcttctc cggtagcggc ggagcttcta catccgagcc 1080

ctgctcccat gcctccagcg actcatggtc gctcggcagc tccttgctcc taacagtgga 1140

ggccagactt aggcacagca cgatgcccac caccaccagt gtgccgcaca aggccgtggc 1200

ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct tgcaccgctg acgcatttga 1260

aagacttaag gcagcggcag aagaagatgc aggcagctga gttgttgtgt tctgataaga 1320

gtcagaggta actcccgttg cggtgctgtt aacggtggag ggcagtgtag tctgagcagt 1380

actcgttgct gccgcgcgcg ccaccagaca taatagctga cagactaaca gactgttcct 1440

ttccatgggt cttttctgca gtcaccgtcc ttgacacgcg tctcagggga cacccaagct 1500

gtctagagcc gccacc 1516

<210> 509
<211> 1062
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 509
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccatggtgat 300

gcggttttgg cagtacacca atgggcgtgg atagcggttt gactcacggg gatttccaag 360

tctccacccc attgacgtca atgggagttt gttttggcac caaaatcaac gggactttcc 420

aaaatgtcgt aataaccccg ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga 480

ggtctatata agcagagctc gtttagtgaa ccgtcagatc ctcactctct tccgcatcgc 540

tgtctgcgag ggccagctgt tgggctcgcg gttgaggaca aactcttcgc ggtctttcca 600

gtactcttgg atcggaaacc cgtcggcctc cgaacggtac tccgccaccg agggacctga 660

gcgagtccgc atcgaccgga tcggaaaacc tctcgagaaa ggcgtctaac cagtcacagt 720

cgcaaggtag gctgagcacc gtggcgggcg gcagcgggtg gcggtcgggg ttgtttctgg 780

cggaggtgct gctgatgatg taattaaagt aggcggtctt gagacggcgg atggtcgagg 840

tgaggtgtgg caggcttgag atccagctgt tggggtgagt actccctctc aaaagcgggc 900

attacttctg cgctaagatt gtcagtttcc aaaaacgagg aggatttgat attcacctgg 960

cccgatctgg ccatacactt gagtgacaat gacatccact ttgcctttct ctccacaggt 1020

gtccactccc aggggacacc caagctgtct agagccgcca cc 1062

<210> 510
<211> 1080
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 510
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaatgacgt 300

cgaggagaag ttccccaact ttcccgcctc tcagcctttg aaagaaagaa aggggagggg 360

gcaggccgcg tgcagccgcg agcggtgctg ggctccggct ccaattcccc atctcagtcg 420

ttcccaaagt cctcctgttt catccaagcg tgtaagggtc cccgtccttg actccctagt 480

gtcctgctgc ccacagtcca gtcctgggaa ccagcaccga tcacctccca tcgggccaat 540

ctcagtccct tccccctac gtcggggccc acacgctcgg tgcgtgccca gttgaaccag 600

gcggctgcgg aaaaaaaaaa gcggggagaa agtagggccc ggctactagc ggttttacgg 660

gcgcacgtag ctcaggcctc aagaccttgg gctgggactg gctgagcctg gcgggaggcg 720

gggtccgagt caccgcctgc cgccgcgccc ccggtttcta taaattgagc ccgcagcctc 780

ccgcttcgct ctctgctcct cctgttcgac agtcagccgc atcttctttt gcgtcgccag 840

cgtctcaggg gccctggcag aactcggtaa gtctgttgac atgtatgtga tgtatactaa 900

cctgcatggg acgtggattt acttgtgtat gtcagataga gtaaagatta actcttgcat 960

gtgagcgggg catcgagata gcgataaatg agtcaggagg acggatactt atatgtgttg 1020

ttatcctcct ctacagtcaa acagattaag gggacaccca agctgtctag agccgccacc 1080

<210> 511
<211> 1043
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 511
caacctttgg agctaagcca gcaatggtag agggaagatt ctgcacgtcc cttccaggcg 60

gcctccccgt caccaccccc cccaacccgc cccgaccgga gctgagagta attcatacaa 120

aaggactcgc ccctgccttg gggaatccca gggaccgtcg ttaaactccc actaacgtag 180

aacccagaga tcgctgcgtt cccgcccccc cacccgcccg ctctcgtcat cactgaggtg 240

gagaatagca tgcgtgaggc tccggtgccc gtcagtgggc agagcgcaca tcgcccacag 300

tccccgagaa gttgggggga ggggtcggca attgaacggg tgcctagaga aggtggcgcg 360

gggtaaactg ggaaagtgat gtcgtgtact ggctccgcct ttttcccgag ggtgggggag 420

aaccgtatat aagtgcagta gtcgccgtga acgttctttt tcgcaacggg tttgccgcca 480

gaacacagcg tctcaggggc tctcactctc ttccgcatcg ctgtctgcga gggccagctg 540

ttgggctcgc ggttgaggac aaactcttcg cggtctttcc agtactcttg gatcggaaac 600

ccgtcggcct ccgaacggta ctccgccacc gagggacctg agcgagtccg catcgaccgg 660

atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag tcgcaaggta ggctgagcac 720

cgtggcgggc ggcagcgggt ggcggtcggg gttgtttctg gcggaggtgc tgctgatgat 780

gtaattaaag taggcggtct tgagagggcg gatggtcgag gtgaggtgtg gcaggcttga 840

gatccagctg ttggggtgag tactccctct caaaagcggg cattacttct gcgctaagat 900

tgtcagtttc caaaaacgag gaggatttga tattcacctg gcccgatctg gccatacact 960

tgagtgacaa tgacatccac tttgcctttc tctccacagg tgtccactcc caggggacac 1020

ccaagctgtc tagagccgcc acc 1043

<210> 512
<211> 1076
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 512
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaatgacgt 300

cgaggagaag ttccccaact ttcccgcctc tcagcctttg aaagaaagaa aggggagggg 360

gcaggccgcg tgcagccgcg agcggtgctg ggctccggct ccaattcccc atctcagtcg 420

ttcccaaagt cctcctgttt catccaagcg tgtaagggtc cccgtccttg actccctagt 480

gtcctgctgc ccacagtcca gtcctgggaa ccagcaccga tcacctccca tcgggccaat 540

ctcagtccct tccccctac gtcggggccc acacgctcgg tgcgtgccca gttgaaccag 600

gcggctgcgg aaaaaaaaaa gcggggagaa agtagggccc ggctactagc ggttttacgg 660

gcgcacgtag ctcaggcctc aagaccttgg gctgggactg gctgagcctg gcgggaggcg 720

gggtccgagt caccgcctgc cgccgcgccc ccggtttcta taaattgagc ccgcagcctc 780

ccgcttcgct ctctgctcct cctgttcgac agtcagccgc atcttctttt gcgtcgccag 840

cgtctcaggg gcggtgaggt gtggcaggct tgagatccag ctgttggggt gagtactccc 900

tctcaaaagc gggcattact tctgcgctaa gattgtcagt ttccaaaaac gaggaggatt 960

tgatattcac ctggcccgat ctggccatac acttgagtga caatgacatc cactttgcct 1020

ttctctccac aggtgtccac tcccagggga cacccaagct gtctagagcc gccacc 1076

<210> 513
<211> 1080
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 513
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaatgacgt 300

cgaggagaag ttccccaact ttcccgcctc tcagcctttg aaagaaagaa aggggagggg 360

gcaggccgcg tgcagccgcg agcggtgctg ggctccggct ccaattcccc atctcagtcg 420

ttcccaaagt cctcctgttt catccaagcg tgtaagggtc cccgtccttg actccctagt 480

gtcctgctgc ccacagtcca gtcctgggaa ccagcaccga tcacctccca tcgggccaat 540

ctcagtccct tccccctac gtcggggccc acacgctcgg tgcgtgccca gttgaaccag 600

gcggctgcgg aaaaaaaaaa gcggggagaa agtagggccc ggctactagc ggttttacgg 660

gcgcacgtag ctcaggcctc aagaccttgg gctgggactg gctgagcctg gcgggaggcg 720

gggtccgagt caccgcctgc cgccgcgccc ccggtttcta taaattgagc ccgcagcctc 780

ccgcttcgct ctctgctcct cctgttcgac agtcagccgc atcttctttt gcgtcgccag 840

cgtctcaggg gccctggcag aactcggtaa gtctgttgac atgtatgtga tgtatactaa 900

cctgcatggg acgtggattt acttgtgtat gtcagataga gtaaagatta actcttgcat 960

gtgagcgggg catcgagata gcgataaatg agtcaggagg acggatactt atatgtgttg 1020

ttatcctcct ctacagtcaa acagattaag gggacaccca agctgtctag agccgccacc 1080

<210> 514
<211> 1043
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 514
caacctttgg agctaagcca gcaatggtag agggaagatt ctgcacgtcc cttccaggcg 60

gcctccccgt caccaccccc cccaacccgc cccgaccgga gctgagagta attcatacaa 120

aaggactcgc ccctgccttg gggaatccca gggaccgtcg ttaaactccc actaacgtag 180

aacccagaga tcgctgcgtt cccgcccccc cacccgcccg ctctcgtcat cactgaggtg 240

gagaatagca tgcgtgaggc tccggtgccc gtcagtgggc agagcgcaca tcgcccacag 300

tccccgagaa gttgggggga ggggtcggca attgaacggg tgcctagaga aggtggcgcg 360

gggtaaactg ggaaagtgat gtcgtgtact ggctccgcct ttttcccgag ggtgggggag 420

aaccgtatat aagtgcagta gtcgccgtga acgttctttt tcgcaacggg tttgccgcca 480

gaacacagcg tctcaggggc tctcactctc ttccgcatcg ctgtctgcga gggccagctg 540

ttgggctcgc ggttgaggac aaactcttcg cggtctttcc agtactcttg gatcggaaac 600

ccgtcggcct ccgaacggta ctccgccacc gagggacctg agcgagtccg catcgaccgg 660

atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag tcgcaaggta ggctgagcac 720

cgtggcgggc ggcagcgggt ggcggtcggg gttgtttctg gcggaggtgc tgctgatgat 780

gtaattaaag taggcggtct tgagagggcg gatggtcgag gtgaggtgtg gcaggcttga 840

gatccagctg ttggggtgag tactccctct caaaagcggg cattacttct gcgctaagat 900

tgtcagtttc caaaaacgag gaggatttga tattcacctg gcccgatctg gccatacact 960

tgagtgacaa tgacatccac tttgcctttc tctccacagg tgtccactcc caggggacac 1020

ccaagctgtc tagagccgcc acc 1043

<210> 515
<211> 697
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 515
attgattatt gactagttat taatagtaat caattacggg gtcattagtt catagcccat 60

atatggagtt ccgcgttaca taacttacgg taaatggccc gcctggctga ccgcccaacg 120

acccccgccc attgacgtca ataatgacgt atgttcccat agtaacgcca atagggactt 180

tccattgacg tcaatgggtg gagtatttac ggtaaactgc ccacttggca gtacatcaag 240

tgtatcatat gccaagtacg ccccctattg acgtcaatga cggtaaatgg cccgcctggc 300

attatgccca gtacatgacc ttatgggact ttcctacttg gcagtacatc tacgtattag 360

tcatcgctat taccatggtg atgcggtttt ggcagtacat caatgggcgt ggatagcggt 420

ttgactcacg gggatttcca agtctccacc ccattgacgt caatgggagt ttgttttggc 480

accaaaatca acgggacttt ccaaaatgtc gtaacaactc cgccccattg acgcaaatgg 540

gcggtaggcg tgtacggtgg gaggtctata taagcagagc tcgtttagtg aaccgtcaga 600

tcgcctgtag acgccatcca cgctgttttg acctccatag aagacaccgg gaccgatcca 660

gcctccgggg acacccaagc tgtctagagc cgccacc 697

<210> 516
<211> 1670
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 516
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtacgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

atgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaacccgcc 300

ccgaccggag ctgagagtaa ttcatacaaa aggactcgcc cctgccttgg ggaatcccag 360

ggaccgtcgt taaactccca ctaacgtaga acccagagat cgctgcgttc ccgccccctc 420

acccgcccgc tctcgtcatc actgaggtgg agaatagcat gcgtgaggct ccggtgcccg 480

tcagtgggca gagcgcacat cgcccacagt ccccgagaag ttgggggggag gggtcggcaa 540

ttgaacgggt gcctagagaa ggtggcgcgg ggtaaactgg gaaagtgatg tcgtgtactg 600

gctccgcctt tttcccgagg gtgggggaga accgtatata agtgcagtag tcgccgtgaa 660

cgttcttttt cgcaacgggt ttgccgccag aacacaggta agtgccgtgt gtggttcccg 720

cgggcctggc ctctttacgg gttatggccc ttgcgtgcct tgaattactt ccacctggct 780

ccagtacgtg attcttgatc ccgagctgga gccaggggcg ggccttgcgc tttaggagcc 840

ccttcgcctc gtgcttgagt tgaggcctgg cctgggcgct ggggccgccg cgtgcgaatc 900

tggtggcacc ttcgcgcctg tctcgctgct ttcgataagt ctctagccat ttaaaatttt 960

tgatgacgtg ctgcgacgct ttttttctgg caagatagtc ttgtaaatgc gggccaggat 1020

ctgcacactg gtatttcggt ttttgggccc gcggccggcg acggggcccg tgcgtcccag 1080

cgcacatgtt cggcgaggcg gggcctgcga gcgcggccac cgagaatcgg acgggggtag 1140

tctcaagctg gccggcctgc tctggtgcct ggcctcgcgc cgccgtgtat cgccccgccc 1200

tgggcggcaa ggctggcccg gtcggcacca gttgcgtgag cggaaagatg gccgcttccc 1260

ggccctgctc cagggggctc aaaatggagg acgcggcgct cgggagagcg ggcgggtgag 1320

tcacccacac aaaggaaaag ggcctttccg tcctcagccg tcgcttcatg tgactccacg 1380

gagtaccggg cgccgtccag gcacctcgat tagttctgga gcttttggag tacgtcgtct 1440

ttaggttggg gggaggggtt ttatgcgatg gagtttcccc acactgagtg ggtggagact 1500

gaagttaggc cagcttggca cttgatgtaa ttctccttgg aatttggcct ttttgagttt 1560

ggatcttggt tcattctcaa gcctcagaca gtggttcaaa gtttttttct tccatttcag 1620

gtgtcctgaa cacgtctcag gggacaccca agctgtctag agccgccacc 1670

<210> 517
<211> 1469
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 517
acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 60

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 120

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtccgcc 180

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 240

acgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccagcacatc 300

gcccacagtc cccgagaagt tgggggggag ggtcggcaat tgaaccggtg cctagagaag 360

gtggcgcggg gtaaactggg aaagtgatgt cgtgtactgg ctccgccttt ttcccgaggg 420

tgggggagaa ccgtatataa gtgcagtagt cgccgtgaac gttcttttc gcaacgggtt 480

tgccgccaga acacaggtaa gtgccgtgtg tggttcccgc gggcctggcc tctttacggg 540

ttatggccct tgcgtgcctt gaattacttc cacctggctc cagtacgtga ttcttgatcc 600

cgagctggag ccaggggcgg gccttgcgct ttaggagccc cttcgcctcg tgcttgagtt 660

gaggcctggc ctgggcgctg gggccgccgc gtgcgaatct ggtggcacct tcgcgcctgt 720

ctcgctgctt tcgataagtc tctagccatt taaaattttt gatgacgtgc tgcgacgctt 780

ttttctggc aagatagtct tgtaaatgcg ggccaggatc tgcacactgg tatttcggtt 840

tttgggcccg cggccggcga cggggcccgt gcgtcccagc gcacatgttc ggcgaggcgg 900

ggcctgcgag cgcggccacc gagaatcgga cgggggtagt ctcaagctgg ccggcctgct 960

ctggtgcctg gcctcgcgcc gccgtgtatc gccccgccct gggcggcaag gctggcccgg 1020

tcggcaccag ttgcgtgagc ggaaagatgg ccgcttcccg gccctgctcc agggggctca 1080

aaatggagga cgcggcgctc gggagagcgg gcgggtgagt cacccacaca aaggaaaagg 1140

gcctttccgt cctcagccgt cgcttcatgt gactccacgg agtaccgggc gccgtccagg 1200

cacctcgatt agttctggag cttttggagt acgtcgtctt taggttgggg ggaggggttt 1260

tatgcgatgg agtttcccca cactgagtgg gtggagactg aagttaggcc agcttggcac 1320

ttgatgtaat tctccttgga atttggcctt tttgagtttg gatcttggtt cattctcaag 1380

cctcagacag tggttcaaag ttttttttctt ccatttcagg tgtcctgaac acgtctcagg 1440

ggacacccaa gctgtctaga gccgccacc 1469

<210> 518
<211> 1311
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 518
gagtcaatgg gaaaaaccca ttggagccaa gtacactgac tcaataggga ctttccattg 60

ggttttgccc agtacataag gtcaataggg ggtgagtcaa caggaaagtc ccattggagc 120

caagtacatt gagtcaatag ggactttcca atgggttttg cccagtacat aaggtcaatg 180

ggaggtaagc caatgggttt ttcccattac tgacatgtat actgagtcat tagggacttt 240

ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga aagtcccatt 300

ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag tacaaaaggt 360

caatagggggg tgagtcaatg ggtttttccc attattggca catacataag gtcaataggg 420

gtgactagta aatcaacggg accgaagaac aacgaggaga agatcctcaa cttttccgca 480

gccttttcaa taatggggag aggttcgatg atgcagtggc agggtgaccc acacttctcc 540

atttcccctg ttctcccatt ttactcggga agcagcattc aggtttctgg gtcctggatg 600

tccttggtgc acactccaag gactcctcgt ccttaagttc atagtctgta ttccctgagt 660

cctatcctgg gaaccatcac ccggtcacct cctgagcggg gcaatctcag ctcccctccc 720

cctatcagtt cggagcccac acgcttggtg cgtgcacatt tcaaaaatga ggcgggtcca 780

aagagaggga ggaggggaaa tgagagaggc ccagctactc gcggctttac gggtgcacgt 840

agctcaggcc tctgcgccct tgagctagga ctggataagc agggcgggag gcggggcgcg 900

cgtcatcagc tccccccccac catccgggtt cctataaata cggactgcag ccctccctgg 960

tgctctctgc tcctccctgt tccagagtcg gccgcatctt cttgtgcagt gccaggtgaa 1020

aatcgcggag tgggccgcag gaggccgggg acagtcggaa actgggaagg ggagtgggca 1080

ctgtacgggt ctagggatgc tggtgcgaag tgtgcaagcc ggacccaggc tccgcattgc 1140

agggggggga tgatggagga cgtgatgggg cgcacggcgg gaatggaggc ggggtggggg 1200

aggggactgc ctggtgtcct tcgggccacg ctaatctcat tttcttctcc tgcagcctcg 1260

tcccgtagac aaacgtctca ggggacaccc aagctgtcta gagccgccac c 1311

<210> 519
<211> 1755
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 519
gagtcaatgg gaaaaaccca ttggagccaa gtacactgac tcaataggga ctttccattg 60

ggttttgccc agtacataag gtcaataggg ggtgagtcaa caggaaagtc ccattggagc 120

caagtacatt gagtcaatag ggactttcca atgggttttg cccagtacat aaggtcaatg 180

ggaggtaagc caatgggttt ttcccattac tgacatgtat actgagtcat tagggacttt 240

ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga aagtcccatt 300

ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag tacaaaaggt 360

caataggggg tgagtcaatg ggtttttccc attattggca catacataag gtcaataggg 420

gtgactagta aatcaacggg actctctctt ttttttttt ttttttttt tttttccaaa 480

aggaggggag agggggtaaa aaaatgctgc actgtgcggc taggccggtg agtgagcggc 540

gcggagccaa tcagcgctcg ccgttccgaa agttgccttt tatggctcga gtggccgctg 600

tggcgtccta taaaacccgg cggcgcaacg cgcagccact gtcgagtccg cgtccacccg 660

cgagcacagg cctttcgcag ctctttcttc gccgctccac acccgccacc aggtaagcag 720

ggacaacagg cccagccggc cacagccctc ccgtgggcag tgaccgcgct gcagggtcgc 780

gggggacact cggcgcggac accggggaag gctggagggt ggtgccgggc cgcggagcgg 840

acactttcag atccaacttt cagtccaggg tgtagaccct ttacagccgc attgccacgg 900

tgtagacacc ggtggacccg ctctggctca gagcacgcgg cttgggggaa cccattaggg 960

tcgcagtgtg ggcgctatga gagccgatgc agctttcggg tgttgaaccg tatctgccca 1020

ccttgggggg aggacacaag gtcgggagcc aaacgccacg atcatgcctt ggtggcccat 1080

gggtctttgt ctaaaccggt ttgcccattt ggcttgccgg gcgggcgggc gcggcgggcc 1140

cggctcggcc gggtgggggc tgggttgcca ctgcgcttgc gcgctctatg gctgggtatt 1200

ggggcgcgtg cacgctgggg agggagccct tcctcttccc cctctcccaa gttaaacttg 1260

cgcgtgcgta ttgagacttg gagcgcggcc accggggttg ggcgagggcg gggccgttgt 1320

ccggaagggg cggggtcgca gaggattcgg ggcgcctgct cgcgcttcct gctgggtgtg 1380

gtcgcctccc gcgcgcgcac tagaccgccc ggcgggggggg cgaaggcggg tcttgcgccc 1440

gtttggggag ggggcggaca cctggcttcc tgccgtgggg ccgcctccgg accagcgttt 1500

gcctcttatg gtaataacgc ggccggcctg ggcttcattt gtcccctgag tttgggcgcg 1560

cgccccctgg cggcccgtga ccgcggcttg ccggaagtgg gcagggcggc aacggctgcg 1620

cctagtggcc cgccagtgac cgcgaccctc ttttgtgccc tgatatagtt cgccagcctc 1680

tgctaaccat gttcatgcct tcttcttttt cctacagcgt ctcaggggac acccaagctg 1740

tctagagccg ccacc 1755

<210> 520
<211> 1547
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 520
tatactgagt cattagggac tttccaatgg gttttgccca gtacataagg tcaatagggg 60

tgaatcaaca ggaaagtccc attggagcca agtacactga gtcaataggg actttccatt 120

gggttttgcc cagtacaaaa ggtcaatagg gggtgagtca atgggttttt cccattattg 180

gcacgtacat aaggtcaata ggggtgagtc attgggtttt tccagccaat ttataaaacg 240

ccatgtactt tcccaccatt gacgtcaatg ggctattgaa actaatgcaa cgtgaccttt 300

aaacggtact ttcccatagc tgattaatgg gaaagtaccg ttctcgagcc aatacacgtc 360

aatgggaagt gaaagggcag ccaaaacgta acaccgcccc ggttttcccc tggaaattcc 420

atattggcac gcattctatt ggctgagctg cgttctacgt gggtataaga ggcgcgacca 480

gcgtcggtac cgtcgcagtc ttgggtctga ccaccgtaga acgcagagcc tttttcgcaa 540

cgggtttgcc gccagaacac aggtaagtgc cgtgtgtggt tcccgcgggc ctggcctctt 600

tacgggttat ggcccttgcg tgccttgaat tacttccacc tggctccagt acgtgattct 660

tgatcccgag ctggagccag gggcgggcct tgcgctttag gagccccttc gcctcgtgct 720

tgagttgagg cctggcctgg gcgctggggc cgccgcgtgc gaatctggtg gcaccttcgc 780

gcctgtctcg ctgctttcga taagtctcta gccatttaaa atttttgatg acgtgctgcg 840

acgctttttt tctggcaaga tagtcttgta aatgcgggcc aggatctgca cactggtatt 900

tcggtttttg ggcccgcggc cggcgacggg gcccgtgcgt cccagcgcac atgttcggcg 960

aggcggggcc tgcgagcgcg gccaccgaga atcggacggg ggtagtctca agctggccgg 1020

cctgctctgg tgcctggcct cgcgccgccg tgtatcgccc cgccctgggc ggcaaggctg 1080

gcccggtcgg caccagttgc gtgagcggaa agatggccgc ttcccggccc tgctccaggg 1140

ggctcaaaat ggaggacgcg gcgctcggga gagcgggcgg gtgagtcacc cacacaaagg 1200

aaaagggcct ttccgtcctc agccgtcgct tcatgtgact ccacggagta ccgggcgccg 1260

tccaggcacc tcgattagtt ctggagcttt tggagtacgt cgtctttagg ttgggggggag 1320

gggttttatg cgatggagtt tccccacact gagtgggtgg agactgaagt taggccagct 1380

tggcacttga tgtaattctc cttggaattt ggccttttg agtttggatc ttggttcatt 1440

ctcaagcctc agacagtggt tcaaagtttt tttcttccat ttcaggtgtc gtgaacacgt 1500

ctcaggggtc gtctcagggg acacccaagc tgtctagagc cgccacc 1547

<210> 521
<211> 1797
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 521
gagtcaatgg gaaaaaccca ttggagccaa gtacactgac tcaataggga ctttccattg 60

ggttttgccc agtacataag gtcaataggg ggtgagtcaa caggaaagtc ccattggagc 120

caagtacatt gagtcaatag ggactttcca atgggttttg cccagtacat aaggtcaatg 180

ggaggtaagc caatgggttt ttcccattac tgacatgtat actgagtcat tagggacttt 240

ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga aagtcccatt 300

ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag tacaaaaggt 360

caatagggggg tgagtcaatg ggtttttccc attattggca catacataag gtcaataggg 420

gtgactagta aatcaacggg acctcttcat cctcttcctc aatctcgctt tctctctcgc 480

ttttttttttt ttcttcttct ttttttttttt ttttttcaaa aggaggggag agggggtaaa 540

aaaatgctgc actgtgcggc gaggccggtg agtgagcgac gcggagccaa tcagcgcccg 600

ccgttccgaa agttgccttt tatggctcga gtggccgctg tggcgtccta taaaacccgg 660

cggcgcaacg cgcagccact gtcgagtcgc gtccacccgc gagcacagct tctttgcagc 720

tccttcgttg ccggtccaca cccgccacca ggtaagcagg gacgccgggc ccagcgggcc 780

ttcgctctct cgtggctagt acctcactgc agggtcctga ggatcactca gaacggacac 840

catgggcggg tggagggtgg tgccgggccg cggagcggac actggcacag ccaactttac 900

gcctagcgtg tagactcttt gcagccacat tcccgcggtg tagacactcg tgggcccgct 960

cccgctcggt gcgtggggct tggggacaca ctagggtcgc ggtgtgggca tttgatgagc 1020

cggtgcggct tgcgggtgtt aaaagccgta ttaggtccat cttgagagta cacagtattg 1080

ggaaccagac gctacgatca cgcctcaatg gcctctgggt ctttgtccaa accggtttgc 1140

ctattcggct tgccgggcgg gcgggcgggc gggcgggcgc ggcagggccg gctcggccgg 1200

gtgggggctg ggatgccact gcgcgtgcgc tctctatcac tgggcatcga ggcgcgtgtg 1260

cgctagggag ggacctcttc ctctcccccc cttcctagtt agctgcgcgt gcgtattgag 1320

gctgggagcg cggctgcccg gggttgggcg agggcggggc cgttgtccgg aaggggcggg 1380

gtcacagtgg cacgggcgcc ttgtttgcgc ttcctgctgg gtgtggtcgc ctcccgcgcg 1440

cgcacaagcc gcccgtcggc gcagtgtagg cggagcttgc gcccgtttgg ggagggggcg 1500

gaggtctggc ttcctgccct aggtccgcct ccgggccagc gtttgccttt tatggtaata 1560

atgcggccgg tctgcgcttc ctttgtcccc tgagcttggg cgcgcgcccc ctggcggctc 1620

gagcccgcgg cttgccggaa gtgggcaggg cggcagcggc tgctcttggc ggccccgagg 1680

tgactatagc cttcttttgt gtcttgatag ttcgccagcc tctgctaacc atgttcatgc 1740

cttcttcttt ttcctacagc gtctcagggg acacccaagc tgtctagagc cgccacc 1797

<210> 522
<211> 769
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 522
attgattatt gactagttat taatagtaat caattacggg gtcattagtt catagcccat 60

atatggagtt ccgcgttaca taacttacgg taaatggccc gcctggctga ccgcccaacg 120

acccccgccc attgacgtca ataatgacgt atgttcccat agtaacgcca atagggactt 180

tccattgacg tcaatgggtg gagtatttac ggtaaactgc ccacttggca gtacatcaag 240

tgtatcatat gccaagtccg ccccctattg acgtcaatga cggtaaatgg cccgcctggc 300

attatgccca gtacatgacc ttacgggact ttcctacttg gcagtacatc tacgtattag 360

tcatcgctat taccatggtg atgcggtttt ggcagtacac caatgggcgt ggatagcggt 420

ttgactcacg gggatttcca agtctccacc ccattgacgt caatgggagt ttgttttggc 480

accaaaatca acgggacttt ccaaaatgtc gtaataaccc cgccccgttg acgcaaatgg 540

gcggtaggcg tgtacggtgg gaggtctata taagcagagc tcgtttagtg aaccgtcaga 600

tcgcctggag actccatcca cgctgttttg acctccatag aagataccgg gaccgatcca 660

gcctccgcgg ccgggaacgg tgcattggaa cgcggattcc ccgtgccaag agtgactcac 720

cgtccttgac acggccgcgg ggacacccaa gctgtctaga gccgccacc 769

<210> 523
<211> 904
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 523
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccatgg tgatgcggtt ttggcagtac accaatgggc gtggatagcg gtttgactca 360

cggggatttc caagtctcca ccccattgac gtcaatggga gtttgttttg gcaccaaaat 420

caacgggact ttccaaaatg tcgtaataac cccgccccgt tgacgcaaat gggcggtagg 480

cgtgtacggt gggaggtcta tataagcaga gctcgtttag tgaaccgtca gatcgcctgg 540

agaggccatc cacgctgttt tgacctccat agtggacacc gggaccgatc cagcctccgc 600

ggccgggaac ggtgcattgg aacgcggatt ccccgtgcca agagtgaccc tggcagaact 660

cggtaagtct gttgacatgt atgtgatgta tactaacctg catgggacgt ggatttactt 720

gtgtatgtca gatagagtaa agattaactc ttgcatgtga gcggggcatc gagatagcga 780

taaatgagtc aggaggacgg atacttatat gtgttgttat cctcctctac agtcaaacag 840

attaagagct tccttcttct ttttcctaga agctcagaat aaacgctcaa ctttggccgc 900

cacc 904

<210> 524
<211> 1544
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 524
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgcccccтat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccatgg tgatgcggtt ttggcagtac accaatgggc gtggatagcg gtttgactca 360

cggggatttc caagtctcca ccccattgac gtcaatggga gtttgttttg gcaccaaaat 420

caacgggact ttccaaaatg tcgtaataac cccgccccgt tgacgcaaat gggcggtagg 480

cgtgtacggt gggaggtcta tataagcaga gctcgtttag tgaaccgtca gatcgcctgg 540

agaggcctgc cgccagaaca caggtaagtg ccgtgtgtgg ttcccgcggg cctggcctct 600

ttacgggtta tggcccttgc gtgccttgaa ttacttccac ctggctccag tacgtgattc 660

ttgatcccga gctggagcca ggggcgggcc ttgcgcttta ggagcccctt cgcctcgtgc 720

ttgagttgag gcctggcctg ggcgctgggg ccgccgcgtg cgaatctggt ggcaccttcg 780

cgcctgtctc gctgctttcg ataagtctct agccatttaa aatttttgat gacgtgctgc 840

gacgcttttt ttctggcaag atagtcttgt aaatgcgggc caggatctgc acactggtat 900

ttcggttttt gggcccgcgg ccggcgacgg ggcccgtgcg tcccagcgca catgttcggc 960

gaggcggggc ctgcgagcgc ggccaccgag aatcggacgg gggtagtctc aagctggccg 1020

gcctgctctg gtgcctggcc tcgcgccgcc gtgtatcgcc ccgccctggg cggcaaggct 1080

ggcccggtcg gcaccagttg cgtgagcgga aagatggccg cttcccggcc ctgctccagg 1140

gggctcaaaa tggaggacgc ggcgctcggg agagcgggcg ggtgagtcac ccacacaaag 1200

gaaaagggcc tttccgtcct cagccgtcgc ttcatgtgac tccacggagt accgggcgcc 1260

gtccaggcac ctcgattagt tctggagctt ttggagtacg tcgtctttag gttgggggga 1320

ggggttttat gcgatggagt ttccccacac tgagtgggtg gagactgaag ttaggccagc 1380

ttggcacttg atgtaattct ccttggaatt tggccttttt gagtttggat cttggttcat 1440

tctcaagcct cagacagtgg ttcaaagttt ttttcttcca tttcagagct tccttcttct 1500

ttttcctaga agctcagaat aaacgctcaa ctttggccgc cacc 1544

<210> 525
<211> 1568
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 525
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccatgg tgatgcggtt ttggcagtac accaatgggc gtggatagcg gtttgactca 360

cggggatttc caagtctcca ccccattgac gtcaatggga gtttgttttg gcaccaaaat 420

caacgggact ttccaaaatg tcgtaataac cccgccccgt tgacgcaaat gggcggtagg 480

cgtgtacggt gggaggtcta tataagcaga gctcgtttag tgaaccgtca gatcgcctgg 540

agaggccgcc gtcagaacgc aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg 600

gaggtcctgc tccgagcggg ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat 660

tcccgcttcg agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt 720

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta 780

ctccggccgc actctggtct ttttttttt tgttgttgtt gccctgctgc cttcgattgc 840

cgttcagcaa taggggctaa caaagggagg gtgcggggct tgctcgcccg gagcccggag 900

aggtcatggt tggggaggaa tggagggaca ggagtggcgg ctggggcccg cccgccttcg 960

gagcacatgt ccgacgccac ctggatgggg cgaggcctgg ggtttttccc gaagcaacca 1020

ggctggggtt agcgtgccga ggccatgtgg ccccagcacc cggcacgatc tggcttggcg 1080

gcgccgcgtt gccctgcctc cctaactagg gtgaggccat cccgtccggc accagttgcg 1140

tgcgtggaaa gatggccgct cccgggccct gttgcaagga gctcaaaatg gaggacgcgg 1200

cagcccggtg gagcgggcgg gtgagtcacc cacacaaagg aagagggcct ggtccctcac 1260

cggctgctgc ttcctgtgac cccgtggtcc tatcggccgc aatagtcacc tcgggctttt 1320

gagcacggct agtcgcggcg gggggagggg atgtaatggc gttggagttt gttcacattt 1380

ggtgggtgga gactagtcag gccagcctgg cgctggaagt catttttgga atttgtcccc 1440

ttgagttttg agcggagcta attctcgggc ttcttagcgg ttcaaaggta tcttttaaac 1500

ccttttttag agcttccttc ttctttttcc tagaagctca gaataaacgc tcaactttgg 1560

ccgccacc 1568

<210> 526
<211> 1190
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 526
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccatgg tgatgcggtt ttggcagtac accaatgggc gtggatagcg gtttgactca 360

cggggatttc caagtctcca ccccattgac gtcaatggga gtttgttttg gcaccaaaat 420

caacgggact ttccaaaatg tcgtaataac cccgccccgt tgacgcaaat gggcggtagg 480

cgtgtacggt gggaggtcta tataagcaga gctcgtttag tgaaccgtca gatcgcctgg 540

agaggccatc cacgctgttt tgacctccat agtggacacc gggaccgatc cagcctccgc 600

ggccgggaac ggtgcattgg aacgcggatt ccccgtgcca agagtgactc agatcctcac 660

tctcttccgc atcgctgtct gcgagggcca gctgttgggc tcgcggttga ggacaaactc 720

ttcgcggtct ttccagtact cttggatcgg aaacccgtcg gcctccgaac ggtactccgc 780

caccgaggga cctgagcgag tccgcatcga ccggatcgga aaacctctcg agaaaggcgt 840

ctaaccagtc acagtcgcaa ggtaggctga gcaccgtggc gggcggcagc gggtggcggt 900

cggggttgtt tctggcggag gtgctgctga tgatgtaatt aaagtaggcg gtcttgagac 960

ggcggatggt cgaggtgagg tgtggcaggc ttgagatcca gctgttgggg tgagtactcc 1020

ctctcaaaag cgggcattac ttctgcgcta agattgtcag tttccaaaaa cgaggaggat 1080

ttgatattca cctggcccga tctggccata cacttgagtg acaatgacat ccactttgcc 1140

tttctctcca caggtgtcca ctcccaggtc caagtttaaa cgccgccacc 1190

<210> 527
<211> 922
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 527
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccaagt cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat 360

tgacgtcaat gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag 420

ctgattaatg ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca 480

gccaaaacgt aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat 540

tggctgagct gcgttctacg tgggtataag aggcgcgacc agcgtcggta ccgtcgcagt 600

cttgggtctg accaccgtag aacgcagagc tcctcgctgc agtatcctgc ccaagaaaga 660

gcgacccctg gcagaactcg gtaagtctgt tgacatgtat gtgatgtata ctaacctgca 720

tgggacgtgg atttacttgt gtatgtcaga tagagtaaag attaactctt gcatgtgagc 780

ggggcatcga gatagcgata aatgagtcag gaggacggat acttatatgt gttgttatcc 840

tcctctacag tcaaacagat taagagcttc cttcttcttt ttcctagaag ctcagaataa 900

acgctcaact ttggccgcca cc 922

<210> 528
<211> 1610
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 528
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccaagt cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat 360

tgacgtcaat gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag 420

ctgattaatg ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca 480

gccaaaacgt aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat 540

tggctgagct gcgttctacg tgggtataag aggcgcgacc agcgtcggta ccgtcgcagt 600

cttgggtctg acctgccgcc agaacacagg taagtgccgt gtgtggttcc cgcgggcctg 660

gcctctttac gggttatggc ccttgcgtgc cttgaattac ttccacctgg ctccagtacg 720

tgattcttga tcccgagctg gagccagggg cgggccttgc gctttaggag ccccttcgcc 780

tcgtgcttga gttgaggcct ggcctgggcg ctggggccgc cgcgtgcgaa tctggtggca 840

ccttcgcgcc tgtctcgctg ctttcgataa gtctctagcc atttaaaatt tttgatgacg 900

tgctgcgacg ctttttttct ggcaagatag tcttgtaaat gcgggccagg atctgcacac 960

tggtatttcg gtttttgggc ccgcggccgg cgacggggcc cgtgcgtccc agcgcacatg 1020

ttcggcgagg cggggcctgc gagcgcggcc accgagaatc ggacgggggt agtctcaagc 1080

tggccggcct gctctggtgc ctggcctcgc gccgccgtgt atcgccccgc cctgggcggc 1140

aaggctggcc cggtcggcac cagttgcgtg agcggaaaga tggccgcttc ccggccctgc 1200

tccagggggc tcaaaatgga ggacgcggcg ctcgggagag cgggcgggtg agtcacccac 1260

acaaaggaaa agggcctttc cgtcctcagc cgtcgcttca tgtgactcca cggagtaccg 1320

ggcgccgtcc aggcacctcg attagttctg gagcttttgg agtacgtcgt ctttaggttg 1380

gggggagggg ttttatgcga tggagtttcc ccacactgag tgggtggaga ctgaagttag 1440

gccagcttgg cacttgatgt aattctcctt ggaatttggc ctttttgagt ttggatcttg 1500

gttcattctc aagcctcaga cagtggttca aagtttttt cttccatttc agagcttcct 1560

tcttcttttt cctagaagct cagaataaac gctcaacttt ggccgccacc 1610

<210> 529
<211> 1208
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 529
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccaagt cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat 360

tgacgtcaat gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag 420

ctgattaatg ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca 480

gccaaaacgt aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat 540

tggctgagct gcgttctacg tgggtataag aggcgcgacc agcgtcggta ccgtcgcagt 600

cttgggtctg accaccgtag aacgcagagc tcctcgctgc agtatcctgc ccaagaaaga 660

gcgacctcag atcctcactc tcttccgcat cgctgtctgc gagggccagc tgttgggctc 720

gcggttgagg acaaactctt cgcggtcttt ccagtactct tggatcggaa acccgtcggc 780

ctccgaacgg tactccgcca ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa 840

acctctcgag aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg 900

gcggcagcgg gtggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa 960

agtaggcggt cttgagacgg cggatggtcg aggtgaggtg tggcaggctt gagatccagc 1020

tgttggggtg agtactccct ctcaaaagcg ggcattactt ctgcgctaag attgtcagtt 1080

tccaaaaacg aggaggattt gatattcacc tggcccgatc tggccataca cttgagtgac 1140

aatgacatcc actttgcctt tctctccaca ggtgtccact cccaggtcca agtttaaacg 1200

ccgccacc 1208

<210> 530
<211> 1488
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 530
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccagca catcgcccac agtccccgag aagttgggag gggtcggcaa ttgaaccggt 360

gcctagagaa ggtggcgcgg ggtaaactgg gaaagtgatg tcgtgtactg gctccgcctt 420

tttcccgagg gtgggggaga accgtatata agtgcagtag tcgccgtgaa cgttcttttt 480

cgcaacgggt ttgccgccag aacacaggta agtgccgtgt gtggttcccg cgggcctggc 540

ctctttacgg gttatggccc ttgcgtgcct tgaattactt ccacctggct ccagtacgtg 600

attcttgatc ccgagctgga gccaggggcg ggccttgcgc tttaggagcc ccttcgcctc 660

gtgcttgagt tgaggcctgg cctgggcgct ggggccgccg cgtgcgaatc tggtggcacc 720

ttcgcgcctg tctcgctgct ttcgataagt ctctagccat ttaaaatttt tgatgacgtg 780

ctgcgacgct ttttttctgg caagatagtc ttgtaaatgc gggccaggat ctgcacactg 840

gtatttcggt ttttgggccc gcggccggcg acggggcccg tgcgtcccag cgcacatgtt 900

cggcgaggcg gggcctgcga gcgcggccac cgagaatcgg acgggggtag tctcaagctg 960

gccggcctgc tctggtgcct ggcctcgcgc cgccgtgtat cgccccgccc tgggcggcaa 1020

ggctggcccg gtcggcacca gttgcgtgag cggaaagatg gccgcttccc ggccctgctc 1080

cagggggctc aaaatggagg acgcggcgct cgggagagcg ggcgggtgag tcacccacac 1140

aaaggaaaag ggcctttccg tcctcagccg tcgcttcatg tgactccacg gagtaccggg 1200

cgccgtccag gcacctcgat tagttctgga gcttttggag tacgtcgtct ttaggttggg 1260

gggaggggtt ttatgcgatg gagtttcccc acactgagtg ggtggagact gaagttaggc 1320

cagcttggca cttgatgtaa ttctccttgg aatttggcct ttttgagttt ggatcttggt 1380

tcattctcaa gcctcagaca gtggttcaaa gtttttttct tccatttcag agcttccttc 1440

ttctttttcc tagaagctca gaataaacgc tcaactttgg ccgccacc 1488

<210> 531
<211> 1513
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 531
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccagca catcgcccac agtccccgag aagttgggag gggtcggcaa ttgaaccggt 360

gcctagagaa ggtggcgcgg ggtaaactgg gaaagtgatg tcgtgtactg gctccgcctt 420

tttcccgagg gtgggggaga accgtatata agtgcagtag tcgccgtgaa cgttcttttt 480

cgcaacgggt ttgccgccag aacacaggtg aggggcgggt gtggcttccg cgggccgccg 540

agctggaggt cctgctccga gcgggccggg ccccgctgtc gtcggcgggg attagctgcg 600

agcattcccg cttcgagttg cgggcggcgc gggaggcaga gtgcgaggcc tagcggcaac 660

cccgtagcct cgcctcgtgt ccggcttgag gcctagcgtg gtgtccgcgc cgccgccgcg 720

tgctactccg gccgcactct ggtctttttt ttttttgttg ttgttgccct gctgccttcg 780

attgccgttc agcaataggg gctaacaaag ggagggtgcg gggcttgctc gcccggagcc 840

cggagaggtc atggttgggg aggaatggag ggacaggagt ggcggctggg gcccgcccgc 900

cttcggagca catgtccgac gccacctgga tggggcgagg cctggggttt ttcccgaagc 960

aaccaggctg gggttagcgt gccgaggcca tgtggcccca gcacccggca cgatctggct 1020

tggcggcgcc gcgttgccct gcctccctaa ctagggtgag gccatcccgt ccggcaccag 1080

ttgcgtgcgt ggaaagatgg ccgctcccgg gccctgttgc aaggagctca aaatggagga 1140

cgcggcagcc cggtggagcg ggcgggtgag tcacccacac aaaggaagag ggcctggtcc 1200

ctcaccggct gctgcttcct gtgaccccgt ggtcctatcg gccgcaatag tcacctcggg 1260

cttttgagca cggctagtcg cggcgggggg aggggatgta atggcgttgg agtttgttca 1320

catttggtgg gtggagacta gtcaggccag cctggcgctg gaagtcattt ttggaatttg 1380

tccccttgag ttttgagcgg agctaattct cgggcttctt agcggttcaa aggtatcttt 1440

taaacccttt tttagagctt ccttcttctt tttcctagaa gctcagaata aacgctcaac 1500

tttggccgcc acc 1513

<210> 532
<211> 1049
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 532
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgcccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccagca catcgcccac agtccccgag aagttgggag gggtcggcaa ttgaaccggt 360

gcctagagaa ggtggcgcgg ggtaaactgg gaaagtgatg tcgtgtactg gctccgcctt 420

tttcccgagg gtgggggaga accgtatata agtgcagtag tcgccgtgaa cgttcttttt 480

cgcaacgggt ttgccgccag aacacagtca gatcctcact ctcttccgca tcgctgtctg 540

cgagggccag ctgttgggct cgcggttgag gacaaactct tcgcggtctt tccagtactc 600

ttggatcgga aacccgtcgg cctccgaacg gtactccgcc accgagggac ctgagcgagt 660

ccgcatcgac cggatcggaa aacctctcga gaaaggcgtc taaccagtca cagtcgcaag 720

gtaggctgag caccgtggcg ggcggcagcg ggtggcggtc ggggttgttt ctggcggagg 780

tgctgctgat gatgtaatta aagtaggcgg tcttgagacg gcggatggtc gaggtgaggt 840

gtggcaggct tgagatccag ctgttggggt gagtactccc tctcaaaagc gggcattact 900

tctgcgctaa gattgtcagt ttccaaaaac gaggaggatt tgatattcac ctggcccgat 960

ctggccatac acttgagtga caatgacatc cactttgcct ttctctccac aggtgtccac 1020

tcccaggtcc aagtttaaac gccgccacc 1049

<210> 533
<211> 1036
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 533
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccaagc ggggctgacg tcgggaggtg gcctccgtgg gaagggacac ccggatcttg 360

acacagcctt ggcagcggag taaggaagag tagggataga ttctggccgc cctcttggcc 420

agcttctcgc cgccccaccc tccgctaggg ccaagagtaa ttcatacaaa aggagggatc 480

gccttcgcaa ggggagagcc cagggaccgt ccctaaattc tcacagaccc aaatccctgt 540

agccgcccca cgacagcgcg aggagcatgc gctcagggct gagcgcgggg agagcagagc 600

acacaagctc atagaccctg gtcgtggggg ggaggaccgg ggagctggcg cggggcaaac 660

tgggaaagcg gtgtcgtgtg ctggctccgc cctcttcccg agggtggggg agaacggtat 720

ataagtgcgg cagtcgcctt ggacgttctt tttcgcaacg ggtttgccgt cagaacgcag 780

cctggcagaa ctcggtaagt ctgttgacat gtatgtgatg tatactaacc tgcatgggac 840

gtggatttac ttgtgtatgt cagatagagt aaagattaac tcttgcatgt gagcggggca 900

tcgagatagc gataaatgag tcaggaggac ggatacttat atgtgttgtt atcctcctct 960

acagtcaaac agattaagag cttccttctt ctttttccta gaagctcaga ataaacgctc 1020

aactttggcc gccacc 1036

<210> 534
<211> 1786
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 534
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccaagc ggggctgacg tcgggaggtg gcctccgtgg gaagggacac ccggatcttg 360

acacagcctt ggcagcggag taaggaagag tagggataga ttctggccgc cctcttggcc 420

agcttctcgc cgccccaccc tccgctaggg ccaagagtaa ttcatacaaa aggagggatc 480

gccttcgcaa ggggagagcc cagggaccgt ccctaaattc tcacagaccc aaatccctgt 540

agccgcccca cgacagcgcg aggagcatgc gctcagggct gagcgcgggg agagcagagc 600

acacaagctc atagaccctg gtcgtggggg ggaggaccgg ggagctggcg cggggcaaac 660

tgggaaagcg gtgtcgtgtg ctggctccgc cctcttcccg agggtggggg agaacggtat 720

ataagtgcgg cagtcgcctt ggacgttctt tttcgcaacg ggtttgccgt cagaacgcag 780

gtgaggggcg ggtgtggctt ccgcgggccg ccgagctgga ggtcctgctc cgagcgggcc 840

gggccccgct gtcgtcggcg gggattagct gcgagcattc ccgcttcgag ttgcgggcgg 900

cgcgggaggc agagtgcgag gcctagcggc aaccccgtag cctcgcctcg tgtccggctt 960

gaggcctagc gtggtgtccg cgccgccgcc gcgtgctact ccggccgcac tctggtcttt 1020

```
ttttttttg ttgttgttgc cctgctgcct tcgattgccg ttcagcaata ggggctaaca     1080

aagggagggt gcggggcttg ctcgcccgga gcccggagag gtcatggttg gggaggaatg     1140

gagggacagg agtggcggct ggggcccgcc cgccttcgga gcacatgtcc gacgccacct     1200

ggatggggcg aggcctgggg tttttcccga agcaaccagg ctggggttag cgtgccgagg     1260

ccatgtggcc ccagcacccg gcacgatctg gcttggcggc gccgcgttgc cctgcctccc     1320

taactagggt gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga tggccgctcc     1380

cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt     1440

gagtcaccca cacaaaggaa gagggcctgg tccctcaccg gctgctgctt cctgtgaccc     1500

cgtggtccta tcggccgcaa tagtcacctc gggcttttga gcacggctag tcgcggcggg     1560

gggaggggat gtaatggcgt tggagtttgt tcacatttgg tgggtggaga ctagtcaggc     1620

cagcctggcg ctggaagtca tttttggaat ttgtcccctt gagttttgag cggagctaat     1680

tctcgggctt cttagcggtt caaaggtatc ttttaaaccc ttttttagag cttccttctt     1740

ctttttccta gaagctcaga ataaacgctc aactttggcc gccacc                    1786
```

<210> 535
<211> 810
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 535

```
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca       60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact      120

ttccattggg ttttgcccag tacaaaaggt caataggggg tgagtcaatg ggtttttccc      180

attattggca cgtacataag gtcaataggg gtgtggtgat gcggttttgg cagtacacca      240

atgggcgtgg atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca      300

atgggagttt gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg      360

ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc      420
```

gtttagtgaa ccgtcagatc gcctggagag gccatccacg ctgttttgac ctccatagtg 480

gacaccggga ccgatccagc ctccgcggcc gggaacggtg cattggaacg cggattcccc 540

gtgccaagag tgaccctggc agaactcggt aagtctgttg acatgtatgt gatgtatact 600

aacctgcatg ggacgtggat ttacttgtgt atgtcagata gagtaaagat taactcttgc 660

atgtgagcgg ggcatcgaga tagcgataaa tgagtcagga ggacggatac ttatatgtgt 720

tgttatcctc ctctacagtc aaacagatta agagcttcct tcttcttttt cctagaagct 780

cagaataaac gctcaacttt ggccgccacc 810

<210> 536
<211> 1450
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 536
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgtggtgat gcggttttgg cagtacacca 240

atgggcgtgg atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca 300

atgggagttt gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg 360

ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc 420

gtttagtgaa ccgtcagatc gcctggagag gcctgccgcc agaacacagg taagtgccgt 480

gtgtggttcc cgcgggcctg gcctctttac gggttatggc ccttgcgtgc cttgaattac 540

ttccacctgg ctccagtacg tgattcttga tcccgagctg gagccagggg cgggccttgc 600

gctttaggag ccccttcgcc tcgtgcttga gttgaggcct ggcctgggcg ctggggccgc 660

cgcgtgcgaa tctggtggca ccttcgcgcc tgtctcgctg ctttcgataa gtctctagcc 720

atttaaaatt tttgatgacg tgctgcgacg ctttttttct ggcaagatag tcttgtaaat 780

gcgggccagg atctgcacac tggtatttcg gtttttgggc ccgcggccgg cgacggggcc 840

cgtgcgtccc agcgcacatg ttcggcgagg cggggcctgc gagcgcggcc accgagaatc 900

ggacgggggt agtctcaagc tggccggcct gctctggtgc ctggcctcgc gccgccgtgt 960

atcgccccgc cctgggcggc aaggctggcc cggtcggcac cagttgcgtg agcggaaaga 1020

tggccgcttc ccggccctgc tccaggggggc tcaaaatgga ggacgcggcg ctcgggagag 1080

cgggcgggtg agtcacccac acaaaggaaa agggcctttc cgtcctcagc cgtcgcttca 1140

tgtgactcca cggagtaccg ggcgccgtcc aggcacctcg attagttctg gagcttttgg 1200

agtacgtcgt ctttaggttg gggggagggg ttttatgcga tggagtttcc ccacactgag 1260

tgggtggaga ctgaagttag gccagcttgg cacttgatgt aattctcctt ggaatttggc 1320

ctttttgagt ttggatcttg gttcattctc aagcctcaga cagtggttca aagtttttt 1380

cttccatttc agagcttcct tcttcttttt cctagaagct cagaataaac gctcaacttt 1440

ggccgccacc 1450

<210> 537
<211> 1474
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 537
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgtggtgat gcggttttgg cagtacacca 240

atgggcgtgg atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca 300

atgggagttt gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg 360

ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc 420

gtttagtgaa ccgtcagatc gcctggagag gccgccgtca gaacgcaggt gaggggcggg 480

tgtggcttcc gcgggccgcc gagctggagg tcctgctccg agcgggccgg gccccgctgt 540

cgtcggcggg gattagctgc gagcattccc gcttcgagtt gcgggcggcg cgggaggcag 600

agtgcgaggc ctagcggcaa ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt 660

ggtgtccgcg ccgccgccgc gtgctactcc ggccgcactc tggtcttttt ttttttgtt 720

gttgttgccc tgctgccttc gattgccgtt cagcaatagg ggctaacaaa gggagggtgc 780

ggggcttgct cgcccggagc ccggagaggt catggttggg gaggaatgga gggacaggag 840

tggcggctgg ggcccgcccg ccttcggagc acatgtccga cgccacctgg atggggcgag 900

gcctggggtt tttcccgaag caaccaggct ggggttagcg tgccgaggcc atgtggcccc 960

agcacccggc acgatctggc ttggcggcgc cgcgttgccc tgcctcccta actagggtga 1020

ggccatcccg tccggcacca gttgcgtgcg tggaaagatg gccgctcccg ggccctgttg 1080

caaggagctc aaaatggagg acgcggcagc ccggtggagc gggcgggtga gtcacccaca 1140

caaaggaaga gggcctggtc cctcaccggc tgctgcttcc tgtgaccccg tggtcctatc 1200

ggccgcaata gtcacctcgg gcttttgagc acggctagtc gcggcggggg gaggggatgt 1260

aatggcgttg gagtttgttc acatttggtg ggtggagact agtcaggcca gcctggcgct 1320

ggaagtcatt tttggaattt gtccccttga gttttgagcg gagctaattc tcgggcttct 1380

tagcggttca aaggtatctt ttaaaccctt ttttagagct tccttcttct ttttcctaga 1440

agctcagaat aaacgctcaa ctttggccgc cacc 1474

<210> 538
<211> 1096
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 538
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgtggtgat gcggttttgg cagtacacca 240

atgggcgtgg atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca 300

atgggagttt gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg 360

ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc 420

gtttagtgaa ccgtcagatc gcctggagag gccatccacg ctgttttgac ctccatagtg 480

gacaccggga ccgatccagc ctccgcggcc gggaacggtg cattggaacg cggattcccc 540

gtgccaagag tgactcagat cctcactctc ttccgcatcg ctgtctgcga gggccagctg 600

ttgggctcgc ggttgaggac aaactcttcg cggtctttcc agtactcttg gatcggaaac 660

ccgtcggcct ccgaacggta ctccgccacc gagggacctg agcgagtccg catcgaccgg 720

atcggaaaac ctctcgagaa aggcgtctaa ccagtcacag tcgcaaggta ggctgagcac 780

cgtggcgggc ggcagcgggt ggcggtcggg gttgtttctg gcggaggtgc tgctgatgat 840

gtaattaaag taggcggtct tgagacggcg gatggtcgag gtgaggtgtg gcaggcttga 900

gatccagctg ttggggtgag tactccctct caaaagcggg cattacttct gcgctaagat 960

tgtcagtttc caaaaacgag gaggatttga tattcacctg gcccgatctg gccatacact 1020

tgagtgacaa tgacatccac tttgcctttc tctccacagg tgtccactcc caggtccaag 1080

tttaaacgcc gccacc 1096

<210> 539
<211> 828
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 539
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

atagggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgagtcatt gggtttttcc agccaattta 240

taaaacgcca tgtactttcc caccattgac gtcaatgggc tattgaaact aatgcaacgt 300

gacctttaaa cggtactttc ccatagctga ttaatgggaa agtaccgttc tcgagccaat 360

acacgtcaat gggaagtgaa agggcagcca aaacgtaaca ccgccccggt tttcccctgg 420

aaattccata ttggcacgca ttctattggc tgagctgcgt tctacgtggg tataagaggc 480

gcgaccagcg tcggtaccgt cgcagtcttg ggtctgacca ccgtagaacg cagagctcct 540

cgctgcagta tcctgcccaa gaaagagcga cccctggcag aactcggtaa gtctgttgac 600

atgtatgtga tgtatactaa cctgcatggg acgtggattt acttgtgtat gtcagataga 660

gtaaagatta actcttgcat gtgagcgggg catcgagata gcgataaatg agtcaggagg 720

acggatactt atatgtgttg ttatcctcct ctacagtcaa acagattaag agcttccttc 780

ttctttttcc tagaagctca gaataaacgc tcaactttgg ccgccacc 828

<210> 540
<211> 1540
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 540
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgagtcatt gggtttttcc agccaattta 240

taaaacgcca tgtactttcc caccattgac gtcaatgggc tattgaaact aatgcaacgt 300

gacctttaaa cggtactttc ccatagctga ttaatgggaa agtaccgttc tcgagccaat 360

acacgtcaat gggaagtgaa agggcagcca aaacgtaaca ccgccccggt tttcccctgg 420

aaattccata ttggcacgca ttctattggc tgagctgcgt tctacgtggg tataagaggc 480

gcgaccagcg tcggtaccgt cgcagtcttg ggtctgaccg ccgtcagaac gcaggtgagg 540

ggcgggtgtg gcttccgcgg gccgccgagc tggaggtcct gctccgagcg ggccgggccc 600

cgctgtcgtc ggcggggatt agctgcgagc attcccgctt cgagttgcgg gcggcgcggg 660

aggcagagtg cgaggcctag cggcaacccc gtagcctcgc ctcgtgtccg gcttgaggcc 720

tagcgtggtg tccgcgccgc cgccgcgtgc tactccggcc gcactctggt ctttttttt 780

tttgttgttg ttgccctgct gccttcgatt gccgttcagc aataggggct aacaaaggga 840

gggtgcgggg cttgctcgcc cggagcccgg agaggtcatg gttggggagg aatggaggga 900

caggagtggc ggctggggcc cgcccgcctt cggagcacat gtccgacgcc acctggatgg 960

ggcgaggcct ggggtttttc ccgaagcaac caggctgggg ttagcgtgcc gaggccatgt 1020

ggccccagca cccggcacga tctggcttgg cggcgccgcg ttgccctgcc tccctaacta 1080

gggtgaggcc atcccgtccg gcaccagttg cgtgcgtgga aagatggccg ctcccgggcc 1140

ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg tggagcgggc gggtgagtca 1200

cccacacaaa ggaagagggc ctggtccctc accggctgct gcttcctgtg accccgtggt 1260

cctatcggcc gcaatagtca cctcgggctt ttgagcacgg ctagtcgcgg cgggggggagg 1320

ggatgtaatg gcgttggagt ttgttcacat ttggtgggtg gagactagtc aggccagcct 1380

ggcgctggaa gtcatttttg gaatttgtcc ccttgagttt tgagcggagc taattctcgg 1440

gcttcttagc ggttcaaagg tatcttttaa acccttttt agagcttcct tcttcttttt 1500

cctagaagct cagaataaac gctcaacttt ggccgccacc 1540

<210> 541
<211> 1114
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 541
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgagtcatt gggtttttcc agccaattta 240

taaaacgcca tgtactttcc caccattgac gtcaatgggc tattgaaact aatgcaacgt 300

gacctttaaa cggtactttc ccatagctga ttaatgggaa agtaccgttc tcgagccaat 360

acacgtcaat gggaagtgaa agggcagcca aaacgtaaca ccgccccggt tttcccctgg 420

aaattccata ttggcacgca ttctattggc tgagctgcgt tctacgtggg tataagaggc 480

gcgaccagcg tcggtaccgt cgcagtcttg ggtctgacca ccgtagaacg cagagctcct 540

cgctgcagta tcctgcccaa gaaagagcga cctcagatcc tcactctctt ccgcatcgct 600

gtctgcgagg gccagctgtt gggctcgcgg ttgaggacaa actcttcgcg gtctttccag 660

tactcttgga tcggaaaccc gtcggcctcc gaacggtact ccgccaccga gggacctgag 720

cgagtccgca tcgaccggat cggaaaacct ctcgagaaag gcgtctaacc agtcacagtc 780

gcaaggtagg ctgagcaccg tggcgggcgg cagcgggtgg cggtcggggt tgtttctggc 840

ggaggtgctg ctgatgatgt aattaaagta ggcggtcttg agacggcgga tggtcgaggt 900

gaggtgtggc aggcttgaga tccagctgtt ggggtgagta ctccctctca aaagcgggca 960

ttacttctgc gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc 1020

ccgatctggc catacacttg agtgacaatg acatccactt tgcctttctc tccacaggtg 1080

tccactccca ggtccaagtt taaacgccgc cacc 1114

<210> 542
<211> 669
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 542
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtggcacatc gcccacagtc cccgagaagt 240

tgggaggggt cggcaattga accggtgcct agagaaggtg gcgcggggta aactgggaaa 300

gtgatgtcgt gtactggctc cgccttttc ccgagggtgg gggagaaccg tatataagtg 360

cagtagtcgc cgtgaacgtt ctttttcgca acgggtttgc cgccagaaca cagcctggca 420

gaactcggta agtctgttga catgtatgtg atgtatacta acctgcatgg gacgtggatt 480

tacttgtgta tgtcagatag agtaaagatt aactcttgca tgtgagcggg gcatcgagat 540

agcgataaat gagtcaggag gacggatact tatatgtgtt gttatcctcc tctacagtca 600

aacagattaa gagcttcctt cttctttttc ctagaagctc agaataaacg ctcaactttg 660

gccgccacc 669

<210> 543
<211> 1394
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 543
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtggcacatc gcccacagtc cccgagaagt 240

tgggaggggt cggcaattga accggtgcct agagaaggtg gcgcggggta aactgggaaa 300

gtgatgtcgt gtactggctc cgccttttc ccgagggtgg gggagaaccg tatataagtg 360

cagtagtcgc cgtgaacgtt ctttttcgca acgggtttgc cgccagaaca caggtaagtg 420

ccgtgtgtgg ttcccgcggg cctggcctct ttacgggtta tggcccttgc gtgccttgaa 480

ttacttccac ctggctccag tacgtgattc ttgatcccga gctggagcca ggggcgggcc 540

ttgcgcttta ggagcccctt cgcctcgtgc ttgagttgag gcctggcctg ggcgctgggg 600

ccgccgcgtg cgaatctggt ggcaccttcg cgcctgtctc gctgctttcg ataagtctct 660

agccatttaa aatttttgat gacgtgctgc gacgcttttt ttctggcaag atagtcttgt 720

aaatgcgggc caggatctgc acactggtat ttcggttttt gggcccgcgg ccggcgacgg 780

ggcccgtgcg tcccagcgca catgttcggc gaggcggggc ctgcgagcgc ggccaccgag 840

aatcggacgg gggtagtctc aagctggccg gcctgctctg gtgcctggcc tcgcgccgcc 900

gtgtatcgcc ccgccctggg cggcaaggct ggcccggtcg gcaccagttg cgtgagcgga 960

aagatggccg cttcccggcc ctgctccagg gggctcaaaa tggaggacgc ggcgctcggg 1020

agagcgggcg ggtgagtcac ccacacaaag gaaaagggcc tttccgtcct cagccgtcgc 1080

ttcatgtgac tccacggagt accgggcgcc gtccaggcac ctcgattagt tctggagctt 1140

ttggagtacg tcgtctttag gttgggggga ggggttttat gcgatggagt ttccccacac 1200

tgagtgggtg gagactgaag ttaggccagc ttggcacttg atgtaattct ccttggaatt 1260

tggccttttt gagtttggat cttggttcat tctcaagcct cagacagtgg ttcaaagttt 1320

ttttcttcca tttcagagct tccttcttct ttttcctaga agctcagaat aaacgctcaa 1380

ctttggccgc cacc 1394

<210> 544
<211> 1419
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 544
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtggcacatc gcccacagtc cccgagaagt 240

tgggaggggt cggcaattga accggtgcct agagaaggtg gcgcggggta aactgggaaa 300

gtgatgtcgt gtactggctc cgccttttttc ccgagggtgg gggagaaccg tatataagtg 360

cagtagtcgc cgtgaacgtt ctttttcgca acgggtttgc cgccagaaca caggtgaggg 420

gcgggtgtgg cttccgcggg ccgccgagct ggaggtcctg ctccgagcgg gccgggcccc 480

gctgtcgtcg gcggggatta gctgcgagca ttcccgcttc gagttgcggg cggcgcggga 540

ggcagagtgc gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct 600

agcgtggtgt ccgcgccgcc gccgcgtgct actccggccg cactctggtc ttttttttt 660

ttgttgttgt tgccctgctg ccttcgattg ccgttcagca ataggggcta acaaagggag 720

ggtgcggggc ttgctcgccc ggagcccgga gaggtcatgg ttggggagga atggagggac 780

aggagtggcg gctggggccc gcccgccttc ggagcacatg tccgacgcca cctggatggg 840

gcgaggcctg gggtttttcc cgaagcaacc aggctggggt tagcgtgccg aggccatgtg 900

gccccagcac ccggcacgat ctggcttggc ggcgccgcgt tgccctgcct ccctaactag 960

ggtgaggcca tcccgtccgg caccagttgc gtgcgtggaa agatggccgc tcccgggccc 1020

tgttgcaagg agctcaaaat ggaggacgcg gcagcccggt ggagcgggcg ggtgagtcac 1080

ccacacaaag gaagagggcc tggtccctca ccggctgctg cttcctgtga ccccgtggtc 1140

ctatcggccg caatagtcac ctcgggcttt tgagcacggc tagtcgcggc gggggggaggg 1200

gatgtaatgg cgttggagtt tgttcacatt tggtgggtgg agactagtca ggccagcctg 1260

gcgctggaag tcatttttgg aatttgtccc cttgagtttt gagcggagct aattctcggg 1320

cttcttagcg gttcaaaggt atcttttaaa ccctttttta gagcttcctt cttctttttc 1380

ctagaagctc agaataaacg ctcaactttg gccgccacc 1419

<210> 545
<211> 955
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 545
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtggcacatc gcccacagtc cccgagaagt 240

tgggaggggt cggcaattga accggtgcct agagaaggtg gcgcggggta aactgggaaa 300

gtgatgtcgt gtactggctc cgccttttc ccgagggtgg gggagaaccg tatataagtg 360

cagtagtcgc cgtgaacgtt ctttttcgca acgggtttgc cgccagaaca cagtcagatc 420

ctcactctct tccgcatcgc tgtctgcgag ggccagctgt tgggctcgcg gttgaggaca 480

aactcttcgc ggtctttcca gtactcttgg atcggaaacc cgtcggcctc cgaacggtac 540

tccgccaccg agggacctga gcgagtccgc atcgaccgga tcggaaaacc tctcgagaaa 600

ggcgtctaac cagtcacagt cgcaaggtag gctgagcacc gtggcgggcg gcagcgggtg 660

gcggtcgggg ttgtttctgg cggaggtgct gctgatgatg taattaaagt aggcggtctt 720

gagacggcgg atggtcgagg tgaggtgtgg caggcttgag atccagctgt tggggtgagt 780

actccctctc aaaagcgggc attacttctg cgctaagatt gtcagtttcc aaaaacgagg 840

aggatttgat attcacctgg cccgatctgg ccatacactt gagtgacaat gacatccact 900

ttgcctttct ctccacaggt gtccactccc aggtccaagt ttaaacgccg ccacc 955

<210> 546
<211> 1667
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 546
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caatagggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgagcgggg ctgacgtcgg gaggtggcct 240

ccgtgggaag ggacacccgg atcttgacac agccttggca gcggagtaag gaagagtagg 300

gatagattct ggccgccctc ttggccagct tctcgccgcc ccaccctccg ctagggccaa 360

gagtaattca tacaaaagga gggatcgcct tcgcaagggg agagcccagg gaccgtccct 420

aaattctcac agacccaaat ccctgtagcc gccccacgac agcgcgagga gcatgcgctc 480

agggctgagc gcggggagag cagagcacac aagctcatag accctggtcg tgggggggag 540

gaccggggag ctggcgcggg gcaaactggg aaagcggtgt cgtgtgctgg ctccgccctc 600

ttcccgaggg tgggggagaa cggtatataa gtgcggcagt cgccttggac gttctttttc 660

gcaacgggtt tgccgtcaga acgcaggtaa gtgccgtgtg tggttcccgc gggcctggcc 720

tctttacggg ttatggccct tgcgtgcctt gaattacttc cacctggctc cagtacgtga 780

ttcttgatcc cgagctggag ccaggggcgg gccttgcgct ttaggagccc cttcgcctcg 840

tgcttgagtt gaggcctggc ctgggcgctg gggccgccgc gtgcgaatct ggtggcacct 900

tcgcgcctgt ctcgctgctt tcgataagtc tctagccatt taaaattttt gatgacgtgc 960

tgcgacgctt tttttctggc aagatagtct tgtaaatgcg ggccaggatc tgcacactgg 1020

tatttcggtt tttgggcccg cggccggcga cggggcccgt gcgtcccagc gcacatgttc 1080

ggcgaggcgg ggcctgcgag cgcggccacc gagaatcgga cgggggtagt ctcaagctgg 1140

ccggcctgct ctggtgcctg gcctcgcgcc gccgtgtatc gccccgccct gggcggcaag 1200

gctggcccgg tcggcaccag ttgcgtgagc ggaaagatgg ccgcttcccg gccctgctcc 1260

agggggctca aaatggagga cgcggcgctc gggagagcgg gcgggtgagt cacccacaca 1320

aaggaaaagg gcctttccgt cctcagccgt cgcttcatgt gactccacgg agtaccgggc 1380

gccgtccagg cacctcgatt agttctggag cttttggagt acgtcgtctt taggttgggg 1440

ggaggggttt tatgcgatgg agtttcccca cactgagtgg gtggagactg aagttaggcc 1500

agcttggcac ttgatgtaat tctccttgga atttggcctt tttgagtttg gatcttggtt 1560

cattctcaag cctcagacag tggttcaaag ttttttttctt ccatttcaga gcttccttct 1620

tctttttcct agaagctcag aataaacgct caactttggc cgccacc 1667

<210> 547
<211> 1692
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 547
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caataggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgagcgggg ctgacgtcgg gaggtggcct 240

ccgtgggaag ggacacccgg atcttgacac agccttggca gcggagtaag gaagagtagg 300

gatagattct ggccgccctc ttggccagct tctcgccgcc ccaccctccg ctagggccaa 360

gagtaattca tacaaaagga gggatcgcct tcgcaagggg agagcccagg gaccgtccct 420

aaattctcac agacccaaat ccctgtagcc gccccacgac agcgcgagga gcatgcgctc 480

agggctgagc gcggggagag cagagcacac aagctcatag accctggtcg tgggggggag 540

gaccggggag ctggcgcggg gcaaactggg aaagcggtgt cgtgtgctgg ctccgccctc 600

ttcccgaggg tgggggagaa cggtatataa gtgcggcagt cgccttggac gttctttttc 660

gcaacgggtt tgccgtcaga acgcaggtga ggggcgggtg tggcttccgc gggccgccga 720

gctggaggtc ctgctccgag cgggccgggc cccgctgtcg tcggcgggga ttagctgcga 780

gcattcccgc ttcgagttgc gggcggcgcg ggaggcagag tgcgaggcct agcggcaacc 840

ccgtagcctc gcctcgtgtc cggcttgagg cctagcgtgg tgtccgcgcc gccgccgcgt 900

gctactccgg ccgcactctg gtctttttt tttttgttgt tgttgccctg ctgccttcga 960

ttgccgttca gcaatagggg ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc 1020

ggagaggtca tggttgggga ggaatggagg gacaggagtg gcggctgggg cccgcccgcc 1080

ttcggagcac atgtccgacg ccacctggat ggggcgaggc ctggggtttt tcccgaagca 1140

accaggctgg ggttagcgtg ccgaggccat gtggccccag cacccggcac gatctggctt 1200

ggcggcgccg cgttgccctg cctccctaac tagggtgagg ccatcccgtc cggcaccagt 1260

tgcgtgcgtg gaaagatggc cgctcccggg ccctgttgca aggagctcaa aatggaggac 1320

gcggcagccc ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gcctggtccc 1380

tcaccggctg ctgcttcctg tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc 1440

ttttgagcac ggctagtcgc ggcgggggga ggggatgtaa tggcgttgga gtttgttcac 1500

atttggtggg tggagactag tcaggccagc ctggcgctgg aagtcatttt tggaatttgt 1560

```
cccttgagt tttgagcgga gctaattctc gggcttctta gcggttcaaa ggtatctttt     1620

aaacccttttt ttagagcttc cttcttcttt ttcctagaag ctcagaataa acgctcaact     1680

ttggccgcca cc                                                         1692
```

<210> 548
<211> 1228
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 548

```
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca       60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact      120

ttccattggg ttttgcccag tacaaaaggt caataggggg tgagtcaatg ggtttttccc      180

attattggca cgtacataag gtcaataggg gtgagcgggg ctgacgtcgg gaggtggcct      240

ccgtgggaag ggacacccgg atcttgacac agccttggca gcggagtaag gaagagtagg      300

gatagattct ggccgccctc ttggccagct tctcgccgcc ccaccctccg ctagggccaa      360

gagtaattca tacaaaagga gggatcgcct tcgcaagggg agagcccagg gaccgtccct      420

aaattctcac agacccaaat ccctgtagcc gccccacgac agcgcgagga gcatgcgctc      480

agggctgagc gcggggagag cagagcacac aagctcatag accctggtcg tgggggggag      540

gaccggggag ctggcgcggg gcaaactggg aaagcggtgt cgtgtgctgg ctccgccctc      600

ttcccgaggg tgggggagaa cggtatataa gtgcggcagt cgccttggac gttctttttc      660

gcaacgggtt tgccgtcaga acgcagtcag atcctcactc tcttccgcat cgctgtctgc      720

gagggccagc tgttgggctc gcggttgagg acaaactctt cgcggtcttt ccagtactct      780

tggatcggaa acccgtcggc ctccgaacgg tactccgcca ccgagggacc tgagcgagtc      840

cgcatcgacc ggatcggaaa acctctcgag aaaggcgtct aaccagtcac agtcgcaagg      900

taggctgagc accgtggcgg gcggcagcgg gtggcggtcg gggttgtttc tggcggaggt      960

gctgctgatg atgtaattaa agtaggcggt cttgagacgg cggatggtcg aggtgaggtg     1020
```

tggcaggctt gagatccagc tgttggggtg agtactccct ctcaaaagcg ggcattactt 1080

ctgcgctaag attgtcagtt tccaaaaacg aggaggattt gatattcacc tggcccgatc 1140

tggccataca cttgagtgac aatgacatcc actttgcctt tctctccaca ggtgtccact 1200

cccaggtcca agtttaaacg ccgccacc 1228

<210> 549
<211> 597
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 549
tggtgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagaggcc 240

atccacgctg ttttgacctc catagtggac accgggaccg atccagcctc cgcggccggg 300

aacggtgcat tggaacgcgg attccccgtg ccaagagtga ccctggcaga actcggtaag 360

tctgttgaca tgtatgtgat gtatactaac ctgcatggga cgtggattta cttgtgtatg 420

tcagatagag taaagattaa ctcttgcatg tgagcggggc atcgagatag cgataaatga 480

gtcaggagga cggatactta tatgtgttgt tatcctcctc tacagtcaaa cagattaaga 540

gcttccttct tctttttcct agaagctcag aataaacgct caactttggc cgccacc 597

<210> 550
<211> 1237
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 550
tggtgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagaggcc 240

tgccgccaga acacaggtaa gtgccgtgtg tggttcccgc gggcctggcc tctttacggg 300

ttatggccct tgcgtgcctt gaattacttc cacctggctc cagtacgtga ttcttgatcc 360

cgagctggag ccaggggcgg gccttgcgct ttaggagccc cttcgcctcg tgcttgagtt 420

gaggcctggc ctgggcgctg gggccgccgc gtgcgaatct ggtggcacct tcgcgcctgt 480

ctcgctgctt tcgataagtc tctagccatt taaaattttt gatgacgtgc tgcgacgctt 540

tttttctggc aagatagtct tgtaaatgcg ggccaggatc tgcacactgg tatttcggtt 600

tttgggcccg cggccggcga cggggcccgt gcgtcccagc gcacatgttc ggcgaggcgg 660

ggcctgcgag cgcggccacc gagaatcgga cgggggtagt ctcaagctgg ccggcctgct 720

ctggtgcctg gcctcgcgcc gccgtgtatc gccccgccct gggcggcaag gctggcccgg 780

tcggcaccag ttgcgtgagc ggaaagatgg ccgcttcccg gccctgctcc agggggctca 840

aaatggagga cgcggcgctc gggagagcgg gcgggtgagt cacccacaca aaggaaaagg 900

gcctttccgt cctcagccgt cgcttcatgt gactccacgg agtaccgggc gccgtccagg 960

cacctcgatt agttctggag cttttggagt acgtcgtctt taggttgggg ggaggggttt 1020

tatgcgatgg agtttcccca cactgagtgg gtggagactg aagttaggcc agcttggcac 1080

ttgatgtaat tctccttgga atttggcctt tttgagtttg gatcttggtt cattctcaag 1140

cctcagacag tggttcaaag tttttttctt ccatttcaga gcttccttct tcttttcct 1200

agaagctcag aataaacgct caactttggc cgccacc 1237

<210> 551
<211> 1261
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 551
tggtgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagaggcc 240

gccgtcagaa cgcaggtgag gggcgggtgt ggcttccgcg ggccgccgag ctggaggtcc 300

tgctccgagc gggccgggcc ccgctgtcgt cggcggggat tagctgcgag cattcccgct 360

tcgagttgcg ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc cgtagcctcg 420

cctcgtgtcc ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg ctactccggc 480

cgcactctgg tctttttttt ttttgttgtt gttgccctgc tgccttcgat tgccgttcag 540

caataggggc taacaaaggg agggtgcggg gcttgctcgc ccggagcccg gagaggtcat 600

ggttggggag gaatggaggg acaggagtgg cggctggggc ccgcccgcct tcggagcaca 660

tgtccgacgc cacctggatg gggcgaggcc tggggttttt cccgaagcaa ccaggctggg 720

gttagcgtgc cgaggccatg tggccccagc acccggcacg atctggcttg gcggcgccgc 780

gttgccctgc ctccctaact agggtgaggc catcccgtcc ggcaccagtt gcgtgcgtgg 840

aaagatggcc gctcccgggc cctgttgcaa ggagctcaaa atggaggacg cggcagcccg 900

gtggagcggg cgggtgagtc acccacacaa aggaagaggg cctggtccct caccggctgc 960

tgcttcctgt gaccccgtgg tcctatcggc cgcaatagtc acctcgggct tttgagcacg 1020

gctagtcgcg gcgggggggag gggatgtaat ggcgttggag tttgttcaca tttggtgggt 1080

ggagactagt caggccagcc tggcgctgga agtcattttt ggaatttgtc cccttgagtt 1140

ttgagcggag ctaattctcg ggcttcttag cggttcaaag gtatctttta aacccttttt 1200

tagagcttcc ttcttctttt tcctagaagc tcagaataaa cgctcaactt tggccgccac 1260

c 1261

<210> 552
<211> 883
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 552
tggtgatgcg gttttggcag tacaccaatg ggcgtggata gcggtttgac tcacggggat 60

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 120

actttccaaa atgtcgtaat aaccccgccc cgttgacgca aatgggcggt aggcgtgtac 180

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagaggcc 240

atccacgctg ttttgacctc catagtggac accgggaccg atccagcctc cgcggccggg 300

aacggtgcat tggaacgcgg attccccgtg ccaagagtga ctcagatcct cactctcttc 360

cgcatcgctg tctgcgaggg ccagctgttg ggctcgcggt tgaggacaaa ctcttcgcgg 420

tctttccagt actcttggat cggaaacccg tcggcctccg aacggtactc cgccaccgag 480

ggacctgagc gagtccgcat cgaccggatc ggaaaacctc tcgagaaagg cgtctaacca 540

gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc agcgggtggc ggtcggggtt 600

gtttctggcg gaggtgctgc tgatgatgta attaaagtag gcggtcttga gacggcggat 660

ggtcgaggtg aggtgtggca ggcttgagat ccagctgttg gggtgagtac tccctctcaa 720

aagcgggcat tacttctgcg ctaagattgt cagtttccaa aaacgaggag gatttgatat 780

tcacctggcc cgatctggcc atacacttga gtgacaatga catccacttt gcctttctct 840

ccacaggtgt ccactcccag gtccaagttt aaacgccgcc acc 883

<210> 553
<211> 1303
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 553
agtcattggg tttttccagc caatttataa aacgccatgt actttcccac cattgacgtc 60

aatgggctat tgaaactaat gcaacgtgac ctttaaacgg tactttccca tagctgatta 120

atgggaaagt accgttctcg agccaataca cgtcaatggg aagtgaaagg gcagccaaaa 180

cgtaacaccg ccccggtttt cccctggaaa ttccatattg gcacgcattc tattggctga 240

gctgcgttct acgtgggtat aagaggcgcg accagcgtcg gtaccgtcgc agtcttgggt 300

ctgacctgcc gccagaacac aggtaagtgc cgtgtgtggt tcccgcgggc ctggcctctt 360

tacgggttat ggcccttgcg tgccttgaat tacttccacc tggctccagt acgtgattct 420

tgatcccgag ctggagccag gggcgggcct tgcgctttag gagccccttc gcctcgtgct 480

tgagttgagg cctggcctgg gcgctggggc cgccgcgtgc gaatctggtg gcaccttcgc 540

gcctgtctcg ctgctttcga taagtctcta gccatttaaa atttttgatg acgtgctgcg 600

acgctttttt tctggcaaga tagtcttgta aatgcgggcc aggatctgca cactggtatt 660

tcggtttttg ggcccgcggc cggcgacggg gcccgtgcgt cccagcgcac atgttcggcg 720

aggcggggcc tgcgagcgcg gccaccgaga atcggacggg ggtagtctca agctggccgg 780

cctgctctgg tgcctggcct cgcgccgccg tgtatcgccc cgccctgggc ggcaaggctg 840

gcccggtcgg caccagttgc gtgagcggaa agatggccgc ttcccggccc tgctccaggg 900

ggctcaaaat ggaggacgcg gcgctcggga gagcgggcgg gtgagtcacc cacacaaagg 960

aaaagggcct ttccgtcctc agccgtcgct tcatgtgact ccacggagta ccgggcgccg 1020

tccaggcacc tcgattagtt ctggagcttt tggagtacgt cgtctttagg ttgggggggag 1080

gggttttatg cgatggagtt tccccacact gagtgggtgg agactgaagt taggccagct 1140

tggcacttga tgtaattctc cttggaattt ggccttttg agtttggatc ttggttcatt 1200

ctcaagcctc agacagtggt tcaaagtttt tttcttccat ttcagagctt ccttcttctt 1260

tttcctagaa gctcagaata aacgctcaac tttggccgcc acc 1303

<210> 554
<211> 1327
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 554
agtcattggg tttttccagc caatttataa aacgccatgt actttcccac cattgacgtc 60

aatgggctat tgaaactaat gcaacgtgac ctttaaacgg tactttccca tagctgatta 120

atgggaaagt accgttctcg agccaataca cgtcaatggg aagtgaaagg gcagccaaaa 180

cgtaacaccg ccccggtttt cccctggaaa ttccatattg gcacgcattc tattggctga 240

gctgcgttct acgtgggtat aagaggcgcg accagcgtcg gtaccgtcgc agtcttgggt 300

ctgaccgccg tcagaacgca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg 360

aggtcctgct ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt 420

cccgcttcga gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta 480

gcctcgcctc gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac 540

tccggccgca ctctggtctt ttttttttt gttgttgttg ccctgctgcc ttcgattgcc 600

gttcagcaat aggggctaac aaagggaggg tgcggggctt gctcgcccgg agcccggaga 660

ggtcatggtt ggggaggaat ggagggacag gagtggcggc tggggcccgc ccgccttcgg 720

agcacatgtc cgacgccacc tggatggggc gaggcctggg gtttttcccg aagcaaccag 780

gctggggtta gcgtgccgag gccatgtggc cccagcaccc ggcacgatct ggcttggcgg 840

cgccgcgttg ccctgcctcc ctaactaggg tgaggccatc ccgtccggca ccagttgcgt 900

gcgtggaaag atggccgctc ccgggccctg ttgcaaggag ctcaaaatgg aggacgcggc 960

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctg gtccctcacc 1020

ggctgctgct tcctgtgacc ccgtggtcct atcggccgca atagtcacct cgggcttttg 1080

agcacggcta gtcgcggcgg ggggagggga tgtaatggcg ttggagtttg ttcacatttg 1140

gtgggtggag actagtcagg ccagcctggc gctggaagtc atttttggaa tttgtcccct 1200

tgagttttga gcggagctaa ttctcgggct tcttagcggt tcaaaggtat cttttaaacc 1260

ctttttaga gcttccttct tctttttcct agaagctcag aataaacgct caactttggc 1320

cgccacc 1327

<210> 555
<211> 901
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 555
agtcattggg tttttccagc caatttataa aacgccatgt actttcccac cattgacgtc 60

aatgggctat tgaaactaat gcaacgtgac ctttaaacgg tactttccca tagctgatta 120

atgggaaagt accgttctcg agccaataca cgtcaatggg aagtgaaagg gcagccaaaa 180

cgtaacaccg ccccggtttt cccctggaaa ttccatattg gcacgcattc tattggctga 240

gctgcgttct acgtgggtat aagaggcgcg accagcgtcg gtaccgtcgc agtcttgggt 300

ctgaccaccg tagaacgcag agctcctcgc tgcagtatcc tgcccaagaa agagcgacct 360

cagatcctca ctctcttccg catcgctgtc tgcgagggcc agctgttggg ctcgcggttg 420

aggacaaact cttcgcggtc tttccagtac tcttggatcg gaaacccgtc ggcctccgaa 480

cggtactccg ccaccgaggg acctgagcga gtccgcatcg accggatcgg aaaacctctc 540

gagaaaggcg tctaaccagt cacagtcgca aggtaggctg agcaccgtgg cgggcggcag 600

cgggtggcgg tcggggttgt ttctggcgga ggtgctgctg atgatgtaat taaagtaggc 660

ggtcttgaga cggcggatgg tcgaggtgag gtgtggcagg cttgagatcc agctgttggg 720

gtgagtactc cctctcaaaa gcgggcatta cttctgcgct aagattgtca gtttccaaaa 780

acgaggagga tttgatattc acctggcccg atctggccat acacttgagt gacaatgaca 840

tccactttgc ctttctctcc acaggtgtcc actcccaggt ccaagtttaa acgccgccac 900

c 901

<210> 556
<211> 456
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 556
gcacatcgcc cacagtcccc gagaagttgg gaggggtcgg caattgaacc ggtgcctaga 60

gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta ctggctccgc ctttttcccg 120

agggtggggg agaaccgtat ataagtgcag tagtcgccgt gaacgttctt tttcgcaacg 180

ggtttgccgc cagaacacag cctggcagaa ctcggtaagt ctgttgacat gtatgtgatg 240

tatactaacc tgcatgggac gtggatttac ttgtgtatgt cagatagagt aaagattaac 300

tcttgcatgt gagcggggca tcgagatagc gataaatgag tcaggaggac ggatacttat 360

atgtgttgtt atcctcctct acagtcaaac agattaagag cttccttctt ctttttccta 420

gaagctcaga ataaacgctc aactttggcc gccacc 456

<210> 557
<211> 1206
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 557
gcacatcgcc cacagtcccc gagaagttgg gaggggtcgg caattgaacc ggtgcctaga 60

gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta ctggctccgc ctttttcccg 120

agggtggggg agaaccgtat ataagtgcag tagtcgccgt gaacgttctt tttcgcaacg 180

ggtttgccgc cagaacacag gtgaggggcg ggtgtggctt ccgcgggccg ccgagctgga 240

ggtcctgctc cgagcgggcc gggccccgct gtcgtcggcg gggattagct gcgagcattc 300

ccgcttcgag ttgcgggcgg cgcgggaggc agagtgcgag gcctagcggc aaccccgtag 360

cctcgcctcg tgtccggctt gaggcctagc gtggtgtccg cgccgccgcc gcgtgctact 420

ccggccgcac tctggtcttt ttttttttg ttgttgttgc cctgctgcct tcgattgccg 480

ttcagcaata ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag 540

gtcatggttg gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga 600

gcacatgtcc gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg 660

ctggggttag cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc 720

gccgcgttgc cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg 780

cgtggaaaga tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca 840

gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg 900

gctgctgctt cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga 960

gcacggctag tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg 1020

tgggtggaga ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt 1080

gagttttgag cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc 1140

ttttttagag cttccttctt ctttttccta gaagctcaga ataaacgctc aactttggcc 1200

gccacc 1206

<210> 558
<211> 729
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 558
agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 60

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 120

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 180

caaggggaga gcccagggac cgtccctaaa ttctcacaga cccaaatccc tgtagccgcc 240

ccacgacagc gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 300

ctcatagacc ctggtcgtgg gggggaggac cggggagctg gcgcggggca aactgggaaa 360

gcggtgtcgt gtgctggctc cgccctcttc ccgagggtgg gggagaacgg tatataagtg 420

cggcagtcgc cttggacgtt ctttttcgca acgggtttgc cgtcagaacg cagcctggca 480

gaactcggta agtctgttga catgtatgtg atgtatacta acctgcatgg gacgtggatt 540

tacttgtgta tgtcagatag agtaaagatt aactcttgca tgtgagcggg gcatcgagat 600

agcgataaat gagtcaggag gacggatact tatatgtgtt gttatcctcc tctacagtca 660

aacagattaa gagcttcctt cttctttttc ctagaagctc agaataaacg ctcaactttg 720

gccgccacc 729

<210> 559
<211> 1454
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 559
agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 60

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 120

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 180

caaggggaga gcccagggac cgtccctaaa ttctcacaga cccaaatccc tgtagccgcc 240

ccacgacagc gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 300

ctcatagacc ctggtcgtgg gggggaggac cggggagctg gcgcggggca aactgggaaa 360

gcggtgtcgt gtgctggctc cgccctcttc ccgagggtgg gggagaacgg tatataagtg 420

cggcagtcgc cttggacgtt ctttttcgca acgggtttgc cgtcagaacg caggtaagtg 480

ccgtgtgtgg ttcccgcggg cctggcctct ttacgggtta tggcccttgc gtgccttgaa 540

ttacttccac ctggctccag tacgtgattc ttgatcccga gctggagcca ggggcgggcc 600

ttgcgcttta ggagcccctt cgcctcgtgc ttgagttgag gcctggcctg ggcgctgggg 660

ccgccgcgtg cgaatctggt ggcaccttcg cgcctgtctc gctgctttcg ataagtctct 720

agccatttaa aatttttgat gacgtgctgc gacgcttttt ttctggcaag atagtcttgt 780

aaatgcgggc caggatctgc acactggtat ttcggttttt gggcccgcgg ccggcgacgg 840

ggcccgtgcg tcccagcgca catgttcggc gaggcggggc ctgcgagcgc ggccaccgag 900

aatcggacgg gggtagtctc aagctggccg gcctgctctg gtgcctggcc tcgcgccgcc 960

gtgtatcgcc ccgccctggg cggcaaggct ggcccggtcg gcaccagttg cgtgagcgga 1020

aagatggccg cttcccggcc ctgctccagg gggctcaaaa tggaggacgc ggcgctcggg 1080

agagcgggcg ggtgagtcac ccacacaaag gaaaagggcc tttccgtcct cagccgtcgc 1140

ttcatgtgac tccacggagt accgggcgcc gtccaggcac ctcgattagt tctggagctt 1200

ttggagtacg tcgtctttag gttgggggga ggggttttat gcgatggagt ttccccacac 1260

tgagtgggtg gagactgaag ttaggccagc ttggcacttg atgtaattct ccttggaatt 1320

tggccttttt gagtttggat cttggttcat tctcaagcct cagacagtgg ttcaaagttt 1380

ttttcttcca tttcagagct tccttcttct ttttcctaga agctcagaat aaacgctcaa 1440

ctttggccgc cacc 1454

<210> 560
<211> 1015
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 560
agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 60

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 120

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 180

caaggggaga gcccagggac cgtccctaaa ttctcacaga cccaaatccc tgtagccgcc 240

ccacgacagc gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 300

ctcatagacc ctggtcgtgg gggggaggac cggggagctg gcgcggggca aactgggaaa 360

gcggtgtcgt gtgctggctc cgccctcttc ccgagggtgg gggagaacgg tatataagtg 420

cggcagtcgc cttggacgtt ctttttcgca acgggtttgc cgtcagaacg cagtcagatc 480

ctcactctct tccgcatcgc tgtctgcgag ggccagctgt tgggctcgcg gttgaggaca 540

aactcttcgc ggtctttcca gtactcttgg atcggaaacc cgtcggcctc cgaacggtac 600

tccgccaccg agggacctga gcgagtccgc atcgaccgga tcggaaaacc tctcgagaaa 660

ggcgtctaac cagtcacagt cgcaaggtag gctgagcacc gtggcgggcg gcagcgggtg 720

gcggtcgggg ttgtttctgg cggaggtgct gctgatgatg taattaaagt aggcggtctt 780

gagacggcgg atggtcgagg tgaggtgtgg caggcttgag atccagctgt tggggtgagt 840

actccctctc aaaagcgggc attacttctg cgctaagatt gtcagtttcc aaaaacgagg 900

aggatttgat attcacctgg cccgatctgg ccatacactt gagtgacaat gacatccact 960

ttgcctttct ctccacaggt gtccactccc aggtccaagt ttaaacgccg ccacc 1015

<210> 561
<211> 1181
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 561
gcacatcgcc cacagtcccc gagaagttgg gaggggtcgg caattgaacc ggtgcctaga 60

gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta ctggctccgc ctttttcccg 120

agggtggggg agaaccgtat ataagtgcag tagtcgccgt gaacgttctt tttcgcaacg 180

ggtttgccgc cagaacacag gtaagtgccg tgtgtggttc ccgcgggcct ggcctcttta 240

cgggttatgg cccttgcgtg ccttgaatta cttccacctg gctccagtac gtgattcttg 300

atcccgagct ggagccaggg gcgggccttg cgctttagga gccccttcgc ctcgtgcttg 360

agttgaggcc tggcctgggc gctggggccg ccgcgtgcga atctggtggc accttcgcgc 420

ctgtctcgct gctttcgata agtctctagc catttaaaat ttttgatgac gtgctgcgac 480

gctttttttc tggcaagata gtcttgtaaa tgcgggccag gatctgcaca ctggtatttc 540

ggtttttggg cccgcggccg gcgacggggc ccgtgcgtcc cagcgcacat gttcggcgag 600

gcggggcctg cgagcgcggc caccgagaat cggacggggg tagtctcaag ctggccggcc 660

tgctctggtg cctggcctcg cgccgccgtg tatcgccccg ccctgggcgg caaggctggc 720

ccggtcggca ccagttgcgt gagcggaaag atggccgctt cccggccctg ctccaggggg 780

ctcaaaatgg aggacgcggc gctcgggaga gcgggcgggt gagtcaccca cacaaaggaa 840

aagggccttt ccgtcctcag ccgtcgcttc atgtgactcc acggagtacc gggcgccgtc 900

caggcacctc gattagttct ggagcttttg gagtacgtcg tctttaggtt gggggggaggg 960

gttttatgcg atggagtttc cccacactga gtgggtggag actgaagtta ggccagcttg 1020

gcacttgatg taattctcct tggaatttgg ccttttgag tttggatctt ggttcattct 1080

caagcctcag acagtggttc aaagtttttt tcttccattt cagagcttcc ttcttctttt 1140

tcctagaagc tcagaataaa cgctcaactt tggccgccac c 1181

<210> 562
<211> 669
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 562
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccaagt cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat 360

tgacgtcaat gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag 420

ctgattaatg ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca 480

gccaaaacgt aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat 540

tggctgagct gcgttctacg tgggtataag aggcgcgacc agcgtcggta ccgtcgcagt 600

cttgggtctg accaccgtag aacgcagagc tcctcgctgc agtatcctgc ccaagaaaga 660

gccgccacc 669

<210> 563
<211> 575
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 563
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caataggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgagtcatt gggtttttcc agccaattta 240

taaaacgcca tgtactttcc caccattgac gtcaatgggc tattgaaact aatgcaacgt 300

gacctttaaa cggtactttc ccatagctga ttaatgggaa agtaccgttc tcgagccaat 360

acacgtcaat gggaagtgaa agggcagcca aaacgtaaca ccgccccggt tttcccctgg 420

aaattccata ttggcacgca ttctattggc tgagctgcgt tctacgtggg tataagaggc 480

gcgaccagcg tcggtaccgt cgcagtcttg ggtctgacca ccgtagaacg cagagctcct 540

cgctgcagta tcctgcccaa gaaagagccg ccacc 575

<210> 564
<211> 671
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 564
gggctctgga gacgacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc 60

ccattgacgt caataatgac gtatgttccc atagtaacgc caatagggac tttccattga 120

cgtcaatggg tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat 180

atgccaagtc cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc 240

cagtacatga ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct 300

attaccatgg tgatgcggtt ttggcagtac accaatgggc gtggatagcg gtttgactca 360

cggggatttc caagtctcca ccccattgac gtcaatggga gtttgttttg gcaccaaaat 420

caacgggact ttccaaaatg tcgtaataac cccgccccgt tgacgcaaat gggcggtagg 480

cgtgtacggt gggaggtcta tataagcaga gctcgtttag tgaaccgtca gatcgcctgg 540

agaggccatc cacgctgttt tgacctccat agtggacacc gggaccgatc cagcctccgc 600

ggccgggaac ggtgcattgg aacgcggatt ccccgtgcca agagtgacgt ccaagtttaa 660

acgccgccac c 671

<210> 565
<211> 577
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 565
gccgccatat actgagtcat tagggacttt ccaatgggtt ttgcccagta cataaggtca 60

ataggggtga atcaacagga aagtcccatt ggagccaagt acactgagtc aatagggact 120

ttccattggg ttttgcccag tacaaaaggt caataggggg tgagtcaatg ggtttttccc 180

attattggca cgtacataag gtcaataggg gtgtggtgat gcggttttgg cagtacacca 240

atgggcgtgg atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca 300

atgggagttt gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg 360

ccccgttgac gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc 420

gtttagtgaa ccgtcagatc gcctggagag gccatccacg ctgttttgac ctccatagtg 480

gacaccggga ccgatccagc ctccgcggcc gggaacggtg cattggaacg cggattcccc 540

gtgccaagag tgacgtccaa gtttaaacgc cgccacc 577

<210> 566
<211> 462
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 566
tcttctttct agactgacca aagacttttt gtcaacttgt acaatctgaa gcaatgtctg 60

gcccacagac agctgagctg taaacaaatg tcacatggaa ataaatactt tatcttgtga 120

actcacttta ttgtgaagga atttgttttg tttttcaaac ctttcctgcg gtgttgacag 180

cccaaggatt atctgaatag agcctaggaa ctggaaatgg aacagtgcag tctgatggta 240

cttaagggag aaagagggaa aggaggtgtg gaagaagaaa aaagagaagc aaggggggg 300

ggagaaaggg agagggagag ggagagggag agggagaggg agagggagag ggagagggag 360

agggagaggg agagggagag ggaggggggag agagagagag agagagagag agagagagag 420

agagagagag agagagagag agagcatgca ctctaacagc aa 462

<210> 567
<211> 463
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 567
tcttctttct agactgacca aagacttttt gtcaacttgt acaatctgaa gcaatgtctg 60

gcccacagac agctgagctg taaacaaatg tcacatggaa ataaatactt tatcttgtga 120

actcacttta ttgtgaagga atttgttttg tttttcaaac ctttcctgcg gtgttgacag 180

cccaaggatt atctgaatag agcctaggaa ctggaaatgg aacagtgcag tctgatggta 240

cttaagggag aaagagggaa aggaggtgtg gaagaagaaa aaagagaagc aaggggggagg 300

gggagaaagg gagagggaga gggagaggga gagggagagg gagagggaga gggagaggga 360

gagggagagg gagagggagg gggaggggga gagagagaga gagagagaga gagagagaga 420

gagagagaga gagagagaga gagagcatgc actctaacag caa 463

<210> 568
<211> 449
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 568
gatccttttc cctctgacca gaattatggg aacatcatga agccccttga gcatctagct 60

tctggctaat aaaggaaatt tattttcatt gcaatagtgt gttggaattt tttgtgtctc 120

tcactcggaa ggacatatgg gagggcaaat catttaaaac atcagaatga gtatttggtt 180

tagagtttgg caacatatgc ccatatgctg gctgccatga acaaaggttg gctataaaga 240

ggtcatcagt atatgaaaca gccccctgct gtccattcct tattccatag aaaagccttg 300

acttgaggtt agatttttt tatattttgt tttgtgttat ttttttcttt aacatcccta 360

aaattttcct tacatgtttt actagccaga tttttcctcc tctcctgact actcccagtc 420

atagctgtcc ctcttctctt atggagatc 449

<210> 569
<211> 415
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 569
tcttctttct agactgacca aagacttttt gtcaacttgt acaatctgaa gcaatgtctg 60

gcccacagac agctgagctg taaacaaatg tcacatggaa ataaatactt tatcttgtga 120

actcacttta ttgtgaagga atttgttttg tttttcaaac ctttcctgcg gtgttgacag 180

cccaaggatt atctgaatag agcctaggaa ctggaaatgg aacagtgcag tctgatggta 240

cttaagggag aaagagggaa aggaggtgtg gaagaagaaa aaagagaagc aaggggggagg 300

gggagaaagg gagagggaga gggagaggga gagggagagg gagagggaga gggagaggga 360

gagggagagg gagagggagg gggaggggga gagagagcat gcactctaac agcaa 415

<210> 570
<211> 284
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 570
ttgacttgac tcatgcttgt ttcactttca catggaattt cccagttatg aaattaataa 60

aaatcaatgg tttccacatc tgtgtgtgcc tgtgtcaccg acccaggtag ggctggcctt 120

gggggagggg gaggccagaa tgactccaag agctacagga aggcaggtca gagaaggggg 180

aggggggggc ggcgcgcagt gtggatctta tatctagtcc ccaggggggag ggggcaataa 240

aagatcttta ttttcattag atctgtgtgt tggttttttg tgtg 284

<210> 571
<211> 353
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 571
ttgacttgac tcatgcttgt ttcactttca catggaattt cccagttatg aaattaataa 60

aaatcaatgg tttccacatc tgtgtgtgcc tgtgtcaccg acccaggtag ggctggcctt 120

gggggagggg gaggccagaa tgactccaag agctacagga aggcaggtca gagatcccac 180

tggacaaaca gtggctggac tctgcaccat aacacacaat caacaggggga gtgagctgga 240

tccaggggga gggggggcg gcgcgcagtg tggatcttat atctagtccc caggggggagg 300

gggcaataaa agatctttat tttcattaga tctgtgtgtt ggttttttgt gtg 353

<210> 572
<211> 424
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 572
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaactgtac ttggctcact ctccttctcc 120

ttacatagga aattacccag ttatgaaatt aataaaaagc cagtgatccc cacatttgtc 180

tgtgcctctg cctaggggct ggcctgggag gggagaaaaa ggccagaata attccaggaa 240

ccgccaagaa ggcaggtcag agatcttgct ggacaaacag tggctgaact ctgttcctta 300

acagagtcag cagcaggggg agggggggggc ggcgcgcagt gtggatctta tatctagtcc 360

ccaggggggag ggggcaataa aagatcttta ttttcattag atctgtgtgt tggttttttg 420

tgtg 424

<210> 573
<211> 330
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 573
ctgtacttgg ctcactctcc ttctccttac ataggaaatt acccagttat gaaattaata 60

aaaagccagt gatccccaca tttgtctgtg cctctgccta ggggctggcc tgggagggga 120

gaaaaaggcc agaataattc caggaaccgc caagaaggca ggtcagagat cttgctggac 180

aaacagtggc tgaactctgt tccttaacag agtcagcagc agggggaggg gggggcggcg 240

cgcagtgtgg atcttatatc tagtccccag ggggaggggg caataaaaga tctttatttt 300

cattagatct gtgtgttggt tttttgtgtg 330

<210> 574
<211> 463
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 574
tcttctttct agactgacca aagacttttt gtcaacttgt acaatctgaa gcaatgtctg 60

gcccacagac agctgagctg taaacaaatg tcacatggaa ataaatactt tatcttgtga 120

actcacttta ttgtgaagga atttgttttg tttttcaaac ctttcctgcg gtgttgacag 180

cccaaggatt atctgaatag agcctaggaa ctggaaatgg aacagtgcag tctgatggta 240

cttaagggag aaagagggaa aggaggtgtg gaagaagaaa aaagagaagc acgggggagg 300

gggagaaagg gagagggaga gggagaggga gagggagagg gagagggaga gggagaggga 360

gagggagagg gagagggagg gggaggggga gagagagaga gagagagaga gagagagaga 420

gagagagaga gagagagaga gagagcatgc actctaacag caa 463

<210> 575
<211> 239
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 575
ctgtcttcca gacatgataa gatacattga tgagtttgga caaaccacaa ctagaatgca 60

gtgaaaaaaa tgctttattt gtgaaatttg tgatgctatt gctttatttg taaccattat 120

aagctgcaat aaacaagtta acaacaacaa ttgcattcat tttatgtttc aggttcaggg 180

ggagatgtgg gaggtttttt aaagcaagta aaacctctac aaatgtggta agaagacag 239

<210> 576
<211> 147
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 576
ctgtcttccc aacttgttta ttgcagctta taatggttac aaataaagca atagcatcac 60

aaatttcaca aataaagcat ttttttcact gcattctagt tgtggtttgt ccaaactcat 120

caatgtatct tatcatgtcg aagacag 147

<210> 577
<211> 287
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 577
ctgtcttcgg gggaggctaa ctgaaacacg gaaggagaca ataccggaag gaacccgcgc 60

tatgacggca ataaaaagac agaataaaac gcacgggtgt tgggtcgttt gttcataaac 120

gcggggttcg gtcccagggc tggcactctg tcgatacccc accgagtccc cattggggcc 180

aatacgcccg cgtttcttcc ttttccccac cccacccccc aagttcgggt gaaggcccag 240

ggctcgcagc caacgtcggg gcggcaggcc ctgccatagg aagacag 287

<210> 578
<211> 65
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 578
ctgtcttcaa taaaagatct ttattttcat tagatctgtg tgttggtttt ttgtgtggaa 60

gacag 65

<210> 579
<211> 264
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 579
ctgtcttccc aacttgttta ttgcagctta taatggttac aaataaagca atagcatcac 60

aaatttcaca aataaagcat ttttttcact gcattctagt tgtggtttgt ccaaactcat 120

caatgtatct tatcatgtca aatcgataat atatggtagg gttcatagcc agagtaacct 180

ttttttttaa tttttatttt attttatttt tgagtcgggc gcgccaaaat gaagtgaagt 240

tcctatactt tctagagaag acag 264

<210> 580
<211> 404
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 580
ctgtcttcgg gggaggctaa ctgaaacacg gaaggagaca ataccggaag gaacccgcgc 60

tatgacggca ataaaaagac agaataaaac gcacgggtgt tgggtcgttt gttcataaac 120

gcggggttcg gtcccagggc tggcactctg tcgatacccc accgagtccc cattggggcc 180

aatacgcccg cgtttcttcc ttttccccac cccacccccc aagttcgggt gaaggcccag 240

ggctcgcagc caacgtcggg gcggcaggcc ctgccataga aatcgataat atatggtagg 300

gttcatagcc agagtaacct tttttttaa tttttatttt attttatttt tgagtcgggc 360

gcgccaaaat gaagtgaagt tcctatactt tctagagaag acag 404

<210> 581
<211> 347
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 581
ctgtcttcat ccacaagccc agctccccac ccatcaccat ggacaatgtt tttttactaa 60

cacttggaca atgatggata ctttttttact aacacttgga caatgatgat gatacactcc 120

tcacttgccc acttagacac aattactaac accacacccc ctcttttatt tctctgtact 180

taatgttttc tgaataaagt gatcctattg tacccacatt aaagacttct ttaactcttt 240

atggttcaca ggacccgaga tgaacataga tattgttaca gcagcggcct ccatgtcagg 300

tataactact gcctcacaca gcgccctgcc aatcagaagg aagacag 347

<210> 582
<211> 280
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 582
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc 280

<210> 583
<211> 852
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 583
aatattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa cggtgtcaga 60

actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa tgataacaat 120

gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg gttttctttt 180

ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttttaa tggaaacaac 240

ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat gagaaacctg 300

tgtgttcctt tggtcaacac cgagacattt aggtgaaagc atatactgag attgagatta 360

acttcctgtg aaacccagtg tcttagacaa ctgtggcttg agcaccacct gttggtattc 420

attacaaact tgctcactac aataaatgaa ttttaagctt taagatgaag tggcatttct 480

tttaacagtt actatgttgg aattggttac aaattttgga gtggactatt gtatatatat 540

atcagttact gttatggatc ccacgtcact attgtatact ctatattata ctctatgtta 600

tactctgtaa tcctactcaa taaacgtgtc acgcctgtga aaccgtacta agtctcccgt 660

gtcttgttat caccatcagg tgacatcctc gcccaggctg tcaatcatgc cggtatcgat 720

tccagtagca ccggccccac gctgacaacc cactcttgca gcgttagcag cgcccctctt 780

aacaagccga cccccaccag cgtcgcggtt actaacactc ctctccccgg ggcatccgct 840

actcccgagc tc 852

<210> 584
<211> 675
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 584
aaatattacc cctaacacct gccaccccag tcttaatcag tggtggaaga actctcagaa 60

ctgtttgtct caattggcca tttaagttta atagtgaaag actggttaat gataacaatg 120

catcggaaaa ccttcaggag gaaaggagaa tgttttgtgg aacatttttg tgtgtgtggc 180

agttttaagt tattagtttt caaaatcagt acttttttaat ggaaacaact tgaccaaaaa 240

tctgtcacag aattttgaac ccattaaaat acaagtttaa tgagaagtct gtctctgtta 300

atgctgaagt cattactaag tgcttagctt agcaaggtat gtggatgccc atttgtgttc 360

caagggattg gactgttcat caggacccag agctgtgtat actctatatt atactctatg 420

ttatactctg taatcctact caataaacgt gtcacgcctg tgaaaccgta ctaagtctcc 480

cgtgtcttct tatcaccatc aggtgacatc ctcgcccagg ctgtcaatca tgccggtatc 540

gattccagta gcaccggccc cacgctgaca acccactctt gcagcgttag cagcgcccct 600

cttaacaagc cgacccccac cagcgtcgcg gttactaaca ctcctctccc cggggcatcc 660

gctactcccg agctc 675

<210> 585
<211> 666
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 585
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaaga acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag attttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatcata ttacccctaa cacctgccac cccagtctta 420

atcagtggtg gaagaactct cagaactgtt tgtctcaatt ggccatttaa gtttaatagt 480

gaaagactgg ttaatgataa caatgcatcg gaaaaccttc aggaggaaag gagaatgttt 540

tgtggaacat ttttgtgtgt gtggcagttt taagttatta gttttcaaaa tcagtacttt 600

ttaatggaaa caacttgacc aaaaatctgt cacagaattt tgaacccatt aaaagttaaa 660

tgagaa 666

<210> 586
<211> 403
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 586
ctgtcttctg gctaataaag gaaatttatt ttcattgcaa tagtgtgttg gaatttttg 60

tgtctctcac tcggaaggac atatgggagg gcaaatcatt taaaacatca gaatgagtat 120

ttggtttaga gtttggcaac atatgcccat atgctggctg ccatgaacaa aggttggcta 180

taaagaggtc atcagtatat gaaacagccc cctgctgtcc attccttatt ccatagaaaa 240

gccttgactt gaggttagat ttttttttata ttttgttttg tgttattttt ttctttaaca 300

tccctaaaat tttccttaca tgttttacta gccagatttt tcctcctctc ctgactactc 360

ccagtcatag ctgtccctct tctcttatgg agatcgaaga cag 403

<210> 587
<211> 469
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 587
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagtttac ctgactcatg gtcctttcac 120

tttcacatgg gatttcccag ttatgaaatt aataaaaatc agtgatttcc acatctgtgt 180

gtgcctgtgc caggctgggt ggggaacagg aggccgagat gattccggga actgtcagaa 240

ggaatcaatg atttccacat cctgtctgtc ttatgtcttg gggggtgggg aggccaggaa 300

gattccagga aggtcagagt caatcaatgg tttccacatc tctcagtgcc tctatctgga 360

ggccaggtag ggctggcctt gggggagggg gaggccagaa tgactccaag agctacagga 420

agggggggagg gggaaaaagg ccagaataat tccaggaacc gccaagaag 469

<210> 588
<211> 682
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 588
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aa 682

<210> 589
<211> 748

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 589
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagcccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagtttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaa 748

<210> 590
<211> 851
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 590
atattatccc taatacttgc caccccactc ttaatcagtg gtggaagaac ggtgtcagaa 60

ctgtttgttt caattggcca tttaagttta gtagtaaaag actggttaat gataacaatg 120

catcgtaaaa ccttcagaag gaaaggagaa tgttttgtgg accactttgg ttttcttttt 180

tgcgtgtggc agttttaagt tattagtttt taaaatcagt acttttaat ggaaacaact 240

tgaccaaaaa tttgtcacag aattttgaga tccattaaaa aagttaaatg agaaacctgt 300

gtgttccttt ggtcaacacc gagacattta ggtgaaagca tatactgaga ttgagattaa 360

cttcctgtga aacccagtgt cttagacaac tgtggcttga gcaccacctg ttggtattca 420

ttacaaactt gctcactaca ataaatgaat tttaagcttt aagatgaagt ggcatttctt 480

ttaacagtta ctatgttgga attggttaca aattttggag tggactattg tatatatata 540

tcagttactg ttatggatcc cacgtcacta ttgtatactc tatattatac tctatgttat 600

actctgtaat cctactcaat aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg 660

tcttgttatc accatcaggt gacatcctcg cccaggctgt caatcatgcc ggtatcgatt 720

ccagtagcac cggccccacg ctgacaaccc actcttgcag cgttagcagc gcccctctta 780

acaagccgac ccccaccagc gtcgcggtta ctaacactcc tctccccggg gcatccgcta 840

ctcccgagct c 851

<210> 591
<211> 760
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 591
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaagt taaatgagaa 760

<210> 592
<211> 358
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 592
ctgtcttccc gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc 60

cctcctcccc tccttgcacc ggcccttcct ggtctttgaa taaaaacttg tttattgcag 120

cttataatgg ttacaaataa agcaatagca tcacaaattt cacaaataaa gcatttttt 180

cactgcattc tagttgtggt ttgtccaaac tcatcaatgt atcttatcat gtcaaatcga 240

taatatatgg tagggttcat agccagagta acctttttt ttaatttta ttttatttta 300

tttttgagtc gggcgcgcca aaatgaagtg aagttcctat actttctaga gaagacag 358

<210> 593
<211> 447
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 593
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgact tgactcatgc ttgtttcact 120

ttcacatgga atttcccagt tatgaaatta ataaaaatca atggtttcca catctgtgtg 180

tgcctgtgtc accgacccag gtagggctgg ccttggggga gggggaggcc agaatgactc 240

caagagctac aggaaggcag gtcagagatc ccactggaca aacagtggct ggactctgca 300

ccataacaca caatcaacag gggagtgagc tggatccagg gggaggggggg ggcggcgcgc 360

agtgtggatc ttatatctag tccccagggg gaggggggcaa taaaagatct ttattttcat 420

tagatctgtg tgttggtttt ttgtgtg 447

<210> 594
<211> 333
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 594
ctgtcttcgc tggagcctcg gtagccgttc ctcctgcccg ctgggcctcc caacgggccc 60

tcctcccctc cttgcaccgg cccttcctgg tctttgaata aacagacatg ataagataca 120

ttgatgagtt tggacaaacc acaactagaa tgcagtgaaa aaaatgcttt atttgtgaaa 180

tttgtgatgc tattgcttta tttgtaacca ttataagctg caataaacaa gttaacaaca 240

acaattgcat tcattttatg tttcaggttc agggggagat gtgggaggtt ttttaaagca 300

agtaaaacct ctacaaatgt ggtaagaaga cag 333

<210> 595
<211> 543
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 595
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagatcct tttccctctg accagaatta 120

tgggaacatc atgaagcccc ttgagcatct agcttctggc taataaagga aatttatttt 180

cattgcaata gtgtgttgga atttttttgtg tctctcactc ggaaggacat atgggagggc 240

aaatcattta aaacatcaga atgagtattt ggtttagagt ttggcaacat atgcccatat 300

gctggctgcc atgaacaaag gttggctata aagaggtcat cagtatatga aacagccccc 360

tgctgtccat tccttattcc atagaaaagc cttgacttga ggttagattt tttttatatt 420

ttgttttgtg ttatttttt ctttaacatc cctaaaattt tccttacatg ttttactagc 480

cagatttttc ctcctctcct gactactccc agtcatagct gtccctcttc tcttatggag 540

atc 543

<210> 596
<211> 1509
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 596
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agaaacttga tctgtcgccg caattcaagc 420

ttcgtgaggc tccggtgccc gtcagtgacc tgctatactc tggagacgca acctttggag 480

ctaagccagc aatggtagag ggaagattct gcacgtccct tccaggcggc ctccccgtca 540

ccacccccc caacccgccc cgaccggagc tgagagtaat tcatacaaaa ggactcgccc 600

ctgccttggg gaatcccagg gaccgtcgtt aaactcccac taacgtagaa cccagagatc 660

gctgcgttcc cgccccctca cccgcccgct ctcgtcatca ctgaggtgga gaatagcatg 720

cgtgaggctc cggtgcccgt cagtgggcag agcgcacatc gcccacagtc cccgagaagt 780

tgggggggagg ggtcggcaat tgaacgggtg cctagagaag gtggcgcggg gtaaactggg 840

aaagtgatgt cgtgtactgg ctccgccttt ttcccgaggg tgggggagaa ccgtatataa 900

gtgcagtagt cgccgtgaac gttcttttc gcaacgggtt tgccgccaga acacagcgtc 960

tcaggggcga gacctctcac tctcttccgc atcgctgtct gcgagggcca gctgttgggc 1020

tcgcggttga ggacaaactc ttcgcggtct ttccagtact cttggatcgg aaacccgtcg 1080

gcctccgaac ggtactccgc caccgaggga cctgagcgag tccgcatcga ccggatcgga 1140

aaacctctcg agaaaggcgt ctaaccagtc acagtcgcaa ggtaggctga gcaccgtggc 1200

gggcggcagc gggtggcggt cggggttgtt tctggcggag gtgctgctga tgatgtaatt 1260

aaagtaggcg gtcttgagag ggcggatggt cgaggtgagg tgtggcaggc ttgagatcca 1320

gctgttgggg tgagtactcc ctctcaaaag cgggcattac ttctgcgcta agattgtcag 1380

tttccaaaaa cgaggaggat ttgatattca cctggcccga tctggccata cacttgagtg 1440

acaatgacat ccactttgcc tttctctcca caggtgtcca ctcccaggtc caagtttaaa 1500

gccgccacc 1509

<210> 597
<211> 1904
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 597
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga cttacggtaa atggcccgcc tggctgaccg 1020

cccaacgacc cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata 1080

gggactttcc attgacgtca atgggtggag tatttacggt aaactgccca cttggcagta 1140

catcaagtgt atcatatgcc aagtccgccc cctattgacg tcaatgacgg taaatggccc 1200

gcctggcatt atgcccagta catgacctta cgggactttc ctacttggca gtacatctac 1260

gtattagtca tcgctattac caatgacgtc gaggagaagt tccccaactt tcccgcctct 1320

cagcctttga aagaaagaaa ggggaggggg caggccgcgt gcagccgcga gcggtgctgg 1380

gctccggctc caattcccca tctcagtcgt tcccaaagtc ctcctgtttc atccaagcgt 1440

gtaagggtcc ccgtccttga ctccctagtg tcctgctgcc cacagtccag tcctgggaac 1500

cagcaccgat cacctcccat cgggccaatc tcagtccctt ccccctacg tcggggccca 1560

cacgctcggt gcgtgcccag ttgaaccagg cggctgcgga aaaaaaaaag cggggagaaa 1620

gtagggcccg gctactagcg gttttacggg cgcacgtagc tcaggcctca agaccttggg 1680

ctgggactgg ctgagcctgg cgggaggcgg ggtccgagtc accgcctgcc gccgcgcccc 1740

cggtttctat aaattgagcc cgcagcctcc cgcttcgctc tctgctcctc ctgttcgaca 1800

gtcagccgca tcttcttttg cgtcgccagc gtctcagggg cgagaccagc ttgcttgttc 1860

tttttgcaga agctcagaat aaacgctcaa ctttggccgc cacc 1904

<210> 598
<211> 1383
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 598
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agaaacttga tctgtcgccg caattcaagc 420

ttcgtgaggc tccggtgccc gtcagtgacc tgctatactc tggagacgac ttacggtaaa 480

tggcccgcct ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt 540

tcccatagta acgccaatag ggactttcca ttgacgtcaa tgggtggagt atttacggta 600

aactgcccac ttggcagtac atcaagtgta tcatatgcca agtccgcccc ctattgacgt 660

caatgacggt aaatggcccg cctggcatta tgcccagtac atgaccttac gggactttcc 720

tacttggcag tacatctacg tattagtcat cgctattacc aatgacgtcg aggagaagtt 780

ccccaacttt cccgcctctc agcctttgaa agaaagaaag gggaggggggc aggccgcgtg 840

cagccgcgag cggtgctggg ctccggctcc aattccccat ctcagtcgtt cccaaagtcc 900

tcctgtttca tccaagcgtg taagggtccc cgtccttgac tccctagtgt cctgctgccc 960

acagtccagt cctgggaacc agcaccgatc acctcccatc gggccaatct cagtcccttc 1020

ccccctacgt cggggcccac acgctcggtg cgtgcccagt tgaaccaggc ggctgcggaa 1080

aaaaaaaagc ggggagaaag tagggcccgg ctactagcgg ttttacgggc gcacgtagct 1140

caggcctcaa gaccttgggc tgggactggc tgagcctggc gggaggcggg gtccgagtca 1200

ccgcctgccg ccgcgccccc ggtttctata aattgagccc gcagcctccc gcttcgctct 1260

ctgctcctcc tgttcgacag tcagccgcat cttcttttgc gtcgccagcg tctcaggggc 1320

gagaccagct tgcttgttct ttttgcagaa gctcagaata aacgctcaac tttggccgcc 1380

acc 1383

<210> 599
<211> 2120
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 599
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga ctacggtaaa tggcccgcct ggctgaccgc 1020

ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta acgccaatag 1080

ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac ttggcagtac 1140

atcaagtgta tcatatgcca agtacgcccc ctattgacgt caatgacggt aaatggcccg 1200

cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag tacatctacg 1260

tattagtcat cgctattacc aatgacgtcg aggagaagtt ccccaacttt cccgcctctc 1320

agcctttgaa agaaagaaag gggaggggggc aggccgcgtg cagccgcgag cggtgctggg 1380

ctccggctcc aattccccat ctcagtcgtt cccaaagtcc tcctgtttca tccaagcgtg 1440

taagggtccc cgtccttgac tccctagtgt cctgctgccc acagtccagt cctgggaacc 1500

agcaccgatc acctcccatc gggccaatct cagtcccttc ccccctacgt cggggcccac 1560

acgctcggtg cgtgcccagt tgaaccaggc ggctgcggaa aaaaaaaagc ggggagaaag 1620

tagggcccgg ctactagcgg ttttacgggc gcacgtagct caggcctcaa gaccttgggc 1680

tgggactggc tgagcctggc gggaggcggg gtccgagtca ccgcctgccg ccgcgccccc 1740

ggtttctata aattgagccc gcagcctccc gcttcgctct ctgctcctcc tgttcgacag 1800

tcagccgcat cttcttttgc gtcgccagcg tctcaggggc gagaccggtg aggtgtggca 1860

ggcttgagat ccagctgttg gggtgagtac tccctctcaa aagcgggcat tacttctgcg 1920

ctaagattgt cagtttccaa aaacgaggag gatttgatat tcacctggcc cgatctggcc 1980

atacacttga gtgacaatga catccacttt gcctttctct ccacaggtgt ccactcccag 2040

gtccaagttt aaacgccgcc accagcttgc ttgttctttt tgcagaagct cagaataaac 2100

gctcaacttt ggccgccacc 2120

<210> 600
<211> 1007
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 600
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agaaacttga tctgtcgccg caattcaaac 420

ttcgtgaggc tccggtgccc gtcagtgact tacggtaaat ggcccgcctg gctgaccgcc 480

caacgacccc cgcccattga cgtcaataat gacgtatgtt cccatagtaa cgccaatagg 540

gactttccat tgacgtcaat gggtggagta tttacggtaa actgcccact tggcagtaca 600

tcaagtgtat catatgccaa gtccgccccc tattgacgtc aatgacggta aatggcccgc 660

ctggcattat gcccagtaca tgaccttacg ggactttcct acttggcagt acatctacgt 720

attagtcatc gctattacca gcacatcgcc cacagtcccc gagaagttgg ggggaggggt 780

cggcaattga accggtgcct agagaaggtg gcgcggggta aactgggaaa gtgatgtcgt 840

gtactggctc cgccttttc ccgagggtgg gggagaaccg tatataagtg cagtagtcgc 900

cgtgaacgtt ctttttcgca acgggtttgc cgccagaaca cagccatcta ttgcttacat 960

ttgcttctga cacaactgtg ttcactagca acctcaaaca gacacca 1007

<210> 601
<211> 2033
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 601
gctcttctat gactgccctg accgaaggtg ctaagctgtt tgagaaggag attccgtaca 60

tcaccgagct ggaaggggac gtcgaaggaa tgaagttcat catcaaggga gaaggaaccg 120

gggacgctac gactggaacc attaaggcca agtatatctg taccactgga gatctgccag 180

tgccttgggc cacccttgtg tcaaccctct cgtatggagt gcagtgtttt gctaagtacc 240

ctagccacat taaggacttc ttcaaatccg ccatgccgga aggttatacc caagagcgca 300

ccatttcttt tgagggagat ggagtgtaca agacccgcgc gatggtcacc tatgagaggg 360

gatctatcta caaccgggtg actctgactg gagaaaactt taagaaggac gggcatattc 420

ttcggaagaa tgtcgccttc cagtgccctc ccagcatcct ttacattctc cccgacactg 480

tgaacaacgg aatccgcgtg gagttcaatc aagcctacga catcgagggg gtgacggaga 540

agctggtgac caagtgtagc cagatgaatc ggccactggc cggttcagcg gctgtccaca 600

ttccgcgcta ccatcatatc acttatcaca ctaagctctc caaagaccgc gatgagagga 660

gagatcacat gtgcctggtg gaagtggtca aggccgtcga tctcgatacc tatcagtaag 720

gttaaaaaat tccgcccccc ccctaacgtt actggccgaa gccgcttgga ataaggccgg 780

tgtgcgtttg tctatatgtt attttccacc atattgccgt cttttggcaa tgtgagggcc 840

cggaaacctg gccctgtctt cttgacgagc attcctaggg gtctttcccc tctcgccaaa 900

ggaatgcaag gtctgttgaa tgtcgtgaag gaagcagttc ctctggaagc ttcttgaaga 960

caaacaacgt ctgtagcgac cctttgcagg cagcggaacc ccccacctgg cgacaggtgc 1020

ctctgcggcc aaaagccacg tgtataagat acacctgcaa aggcggcaca accccagtgc 1080

cacgttgtga gttggatagt tgtggaaaga gtcaaatggc tctcctcaag cgtattcaac 1140

aaggggctga aggatgccca gaaggtaccc cattgtatgg gatctgatct ggggcctcgg 1200

tacacatgct ttacatgtgt ttagtcgagg ttaaaaaacg tctaggcccc ccgaaccacg 1260

gggacgtggt tttcctttga aaaacacgat gataatatgg ccacaaccat ggtgtcaaaa 1320

ggggaggaat tgatcaaaga gaacatgcat atgaaactgt acatggaggg aactgtcaac 1380

aatcaccact tcaaatgcac ctcagagggc gagggaaagc cctacgaagg gacccagacc 1440

atgcgcatta aggtggtcga aggcggacca ctccctttg cattcgacat cctggctacc 1500

tccttcatgt acggatcgcg cacttttatc aagtacccga aggggatccc ggacttcttc 1560

aagcaatcct tccctgaggg attcacttgg gaacgggtca cgacctacga agatggaggc 1620

gtggtgaccg tgatgcaaga cactagcctg gaagatggct gccttgtcta caacgtgaag 1680

atcagaggtg tgaacttccc atccaatggc cccgtgatgc agaaaaagac tctggggtgg 1740

gaagccaata ccgaaatgct ctacccagcg gacggaggac tcgaaggccg gtctgacatg 1800

gccctgaagc tggtcggagg aggacatttg tcgtgtagct ttgtgactac gtaccggtcg 1860

aagaagccgg ccaaaaacct gaagatgccg ggtatccacg cggtggacca tagactggaa 1920

cgcctggagg agagcgataa cgagatgttc gtcgttcaga gggaacacgc tgtggcacga 1980

tattgcgatc tcccgtcgaa gcttggtcac aagctcaatt agggtagaag agc 2033

<210> 602
<211> 2032
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 602
attatcccta atacctgcca ccccactctt aatcagtggt ggaagaacgg tgtcagaact 60

gtttgtttca attggccatt taagtttagt agtaaaagac tggttaatga taacaatgca 120

tcgtaaaacc ttcagaagga aaggagaatg ttttgtggac cactttggtt ttctttttg 180

cgtgtggcag ttttaagtta ttagttttta aaatcagtac tttttaatgg aaacaacttg 240

accaaaaatt tgtcacagaa ttttgacacc cattaaaaaa gttaaatgag aaacctgtgt 300

gttcctttgg agaggggcgg aagggacgtt aggagggagg cagggaggca gggaggcagg 360

gaggaacgga gggaggaaac ttgatctgtc gccgcaattc aagcttcgtg aggctccggt 420

gcccgtcagt gacctgctat actctggaga cgctgggaag ggtccctagg attgtgcacc 480

tctcccgcgg gggacaagca ggggatggcg gggctgacgt cgggaggtgg cctccacggg 540

aagggacacc cggatctcga cacagccttg gcagtggagt caggaagggt aggacagatt 600

ctggacgccc tcttggccag tcctcaccgc cccacccccg atggagccga gagtaattca 660

tacaaaagga gggatcgcct tcgcccctgg gaatcccagg gaccgtcgct aaattctggc 720

cggcctccca gcccggaacc gctgtgcccg cccagcgcgg cgggaggagc ctgcgcctag 780

ggcggatcgc gggtcggcgg gagagcacaa gcccacagtc cccggcggtg ggggaggggc 840

gcgctgagcg ggggcccggg agccagcgcg gggcaaactg ggaaagtggt gtcgtgtgct 900

ggctccgccc tcttcccgag ggtgggggag aacggtataa aagtgcggta gtcgcgttgg 960

acgttctttt tcgcaacggg tttgccgtca gaacgcaggt gagtggcggg tgtggcctcc 1020

gcgggcccgg gctccctcct ttgagcgggg tcggaccgcc gtgcgggtgt cgtcggccgg 1080

gcttctctgc gagcgttccc gccctggatg gcgggctgtg cgggagggcg agggggggag 1140

gcctggcggc ggccccggag cctcgcctcg tgtcgggcgt gaggcctagc gtggcttccg 1200

ccccgccgcg tgccaccgcg gccgcgcttt gctgtctgcc cggctgccct cgattgcctg 1260

cccgcggccc gggccaacaa agggagggcg tggagctggc tggtagggag ccccgtagtc 1320

cgcatgtcgg gcagggagag cggcagcagt cgggggggggg accgggcccg cccgtcccgc 1380

agcacatgtc cgacgccgcc tggacgggta gcggcctgtg tcctgataag gcggccgggc 1440

ggtgggtttt agatgccggg ttcaggtggc cccgggtccc ggcccggtct ggccagtacc 1500

ccgtagtggc ttagctccga ggagggcgag cccgcccgcc cggcaccagt tgcgtgcgcg 1560

gaaagatggc cgctcccggg ccctgtagca aggagctcaa aatggaggac gcggcagccc 1620

ggcggagcgg ggcgggtgag tcacccacac aaaggaagag ggccttgccc ctcgccggcc 1680

gctgcttcct gtgaccccgt ggtgtaccgg ccgcacttca gtcaccccgg gcgctctttc 1740

ggagcaccgc tggcctccgc tgggggaggg gatctgtcta atggcgttgg agtttgctca 1800

catttggtgg gtggagactg tagccaggcc agcctggcca tggaagtaat tcttggaatt 1860

tgcccatttt gagtttggag cgaagctgat tgacaaagct gcttagccgt tcaaaggtat 1920

tcttcgaact ttttttttaa ggtgttgtga aaaccaccgc taattcaaat ccaacagctt 1980

gcttgttctt tttgcagaag ctcagaataa acgctcaact ttggccgcca cc 2032

<210> 603
<211> 1979
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 603
attatcccta atacctgcca ccccactctt aatcagtggt ggaagaacgg tgtcagaact 60

gtttgtttca attggccatt taagtttagt agtaaaagac tggttaatga taacaatgca 120

tcgtaaaacc ttcagaagga aaggagaatg ttttgtggac cactttggtt ttctttttg 180

cgtgtggcag ttttaagtta ttagttttta aaatcagtac tttttaatgg aaacaacttg 240

accaaaaatt tgtcacagaa ttttgacacc cattaaaaaa gttaaatgag aaacctgtgt 300

gttcctttgg agaggggcgg aagggacgtt aggagggagg cagggaggca gggaggcagg 360

gaggaacgga gggaggaaac ttgatctgtc gccgcaattc aagcttcgtg aggctccggt 420

gcccgtcagt gacctgctat actctggaga cgagcggggc tgacgtcggg aggtggcctc 480

cgtgggaagg gacacccgga tcttgacaca gccttggcag cggagtaagg aagagtaggg 540

atagattctg gccgccctct tggccagctt ctcgccgccc caccctccgc tagggccaag 600

agtaattcat acaaaaggag ggatcgcctt cgcaagggga gagcccaggg accgtcccta 660

aattctcaca gacccaaatc cctgtagccg ccccacgaca gcgcgaggag catgcgctca 720

gggctgagcg cggggagagc agagcacaca agctcataga ccctggtcgt gggggggagg 780

accggggagc tggcgcgggg caaactggga aagcggtgtc gtgtgctggc tccgccctct 840

tcccgagggt gggggagaac ggtatataag tgcggcagtc gccttggacg ttctttttcg 900

caacgggttt gccgtcagaa cgcaggtgag gggcgggtgt ggcttccgcg ggccgccgag 960

ctggaggtcc tgctccgagc gggccgggcc ccgctgtcgt cggcggggat tagctgcgag 1020

cattcccgct tcgagttgcg ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc 1080

cgtagcctcg cctcgtgtcc ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg 1140

ctactccggc cgcactctgg tctttttttt ttttgttgtt gttgccctgc tgccttcgat 1200

tgccgttcag caataggggc taacaaaggg agggtgcggg gcttgctcgc ccggagcccg 1260

gagaggtcat ggttggggag gaatggaggg acaggagtgg cggctggggc ccgcccgcct 1320

tcggagcaca tgtccgacgc cacctggatg gggcgaggcc tggggttttt cccgaagcaa 1380

ccaggctggg gttagcgtgc cgaggccatg tggccccagc acccggcacg atctggcttg 1440

gcggcgccgc gttgccctgc ctccctaact agggtgaggc catcccgtcc ggcaccagtt 1500

gcgtgcgtgg aaagatggcc gctcccgggc cctgttgcaa ggagctcaaa atggaggacg 1560

cggcagcccg gtggagcggg cgggtgagtc acccacacaa aggaagaggg cctggtccct 1620

caccggctgc tgcttcctgt gaccccgtgg tcctatcggc cgcaatagtc acctcgggct 1680

tttgagcacg gctagtcgcg gcgggggggag gggatgtaat ggcgttggag tttgttcaca 1740

tttggtgggt ggagactagt caggccagcc tggcgctgga agtcattttt ggaatttgtc 1800

cccttgagtt ttgagcggag ctaattctcg ggcttcttag cggttcaaag gtatctttta 1860

aaccctttttt taggtgttgt gaaaaccacc gctaattcaa agcaagctaa ttcaaatcca 1920

acagcttgct tgttcttttt gcagaagctc agaataaacg ctcaactttg gccgccacc 1979

<210> 604
<211> 2561
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 604
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga gcggggctga cgtcgggagg tggcctccgt 1020

gggaagggac acccggatct tgacacagcc ttggcagcgg agtaaggaag agtagggata 1080

gattctggcc gccctcttgg ccagcttctc gccgccccac cctccgctag ggccaagagt 1140

aattcataca aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat 1200

tctcacagac ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgctcaggg 1260

ctgagcgcgg ggagagcaga gcacacaagc tcatagaccc tggtcgtggg ggggaggacc 1320

ggggagctgg cgcggggcaa actgggaaag cggtgtcgtg tgctggctcc gccctcttcc 1380

cgagggtggg ggagaacggt atataagtgc ggcagtcgcc ttggacgttc tttttcgcaa 1440

cgggtttgcc gtcagaacgc aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg 1500

gaggtcctgc tccgagcggg ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat 1560

tcccgcttcg agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt 1620

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta 1680

ctccggccgc actctggtct ttttttttt tgttgttgtt gccctgctgc cttcgattgc 1740

cgttcagcaa taggggctaa caaagggagg gtgcggggct tgctcgcccg gagcccggag 1800

aggtcatggt tggggaggaa tggagggaca ggagtggcgg ctggggcccg cccgccttcg 1860

gagcacatgt ccgacgccac ctggatgggg cgaggcctgg ggtttttccc gaagcaacca 1920

ggctggggtt agcgtgccga ggccatgtgg ccccagcacc cggcacgatc tggcttggcg 1980

gcgccgcgtt gccctgcctc cctaactagg gtgaggccat cccgtccggc accagttgcg 2040

tgcgtggaaa gatggccgct cccgggccct gttgcaagga gctcaaaatg gaggacgcgg 2100

cagcccggtg gagcgggcgg gtgagtcacc cacacaaagg aagagggcct ggtccctcac 2160

cggctgctgc ttcctgtgac cccgtggtcc tatcggccgc aatagtcacc tcgggctttt 2220

gagcacggct agtcgcggcg gggggagggg atgtaatggc gttggagttt gttcacattt 2280

ggtgggtgga gactagtcag gccagcctgg cgctggaagt catttttgga atttgtcccc 2340

ttgagttttg agcggagcta attctcgggc ttcttagcgg ttcaaaggta tcttttaaac 2400

cctttttag gtgttgtgaa aaccaccgct aattcaaagc aacgtctcag gggctgtctt 2460

cgcaggagcc cgggctgggc ataaaagtca gggcagagcc atctattgct tacatttgct 2520

tctgacacaa ctgtgttcac tagcaacctc aaacagacac c 2561

<210> 605
<211> 2560
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 605
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga gcggggctga cgtcgggagg tggcctccgt 1020

gggaagggac acccggatct tgacacagcc ttggcagcgg agtaaggaag agtagggata 1080

gattctggcc gccctcttgg ccagcttctc gccgccccac cctccgctag ggccaagagt 1140

aattcataca aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat 1200

tctcacagac ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgctcaggg 1260

ctgagcgcgg ggagagcaga gcacacaagc tcatagaccc tggtcgtggg ggggaggacc 1320

ggggagctgg cgcggggcaa actgggaaag cggtgtcgtg tgctggctcc gccctcttcc 1380

cgagggtggg ggagaacggt atataagtgc ggcagtcgcc ttggacgttc tttttcgcaa 1440

cgggtttgcc gtcagaacgc aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg 1500

gaggtcctgc tccgagcggg ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat 1560

tcccgcttcg agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt 1620

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta 1680

ctccggccgc actctggtct ttttttttt gttgttgttg ccctgctgcc ttcgattgcc 1740

gttcagcaat aggggctaac aaagggaggg tgcggggctt gctcgcccgg agcccggaga 1800

ggtcatggtt ggggaggaat ggagggacag gagtggcggc tggggcccgc ccgccttcgg 1860

agcacatgtc cgacgccacc tggatggggc gaggcctggg gtttttcccg aagcaaccag 1920

gctggggtta gcgtgccgag gccatgtggc cccagcaccc ggcacgatct ggcttggcgg 1980

cgccgcgttg ccctgcctcc ctaactaggg tgaggccatc ccgtccggca ccagttgcgt 2040

gcgtggaaag atggccgctc ccgggccctg ttgcaaggag ctcaaaatgg aggacgcggc 2100

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctg gtccctcacc 2160

ggctgctgct tcctgtgacc ccgtggtcct atcggccgca atagtcacct cgggcttttg 2220

agcacggcta gtcgcggcgg ggggagggga tgtaatggcg ttggagtttg ttcacatttg 2280

gtgggtggag actagtcagg ccagcctggc gctggaagtc atttttggaa tttgtcccct 2340

tgagttttga gcggagctaa ttctcgggct tcttagcggt tcaaaggtat cttttaaacc 2400

ctttttttagg tgttgtgaaa accaccgcta attcaaagca acgtctcagg ggctgtcttc 2460

gcaggagccc gggctgggca taaaagtcag ggcagagcca tctattgctt acatttgctt 2520

ctgacacaac tgtgttcact agcaacctca aacagacacc 2560

<210> 606
<211> 2010
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 606
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacaa cctttggagc taagccagca atggtagagg 1020

gaagattctg cacgtccctt ccaggcggcc tccccgtcac cacccccccc aacccgcccc 1080

gaccggagct gagagtaatt catacaaaag gactcgcccc tgccttgggg aatcccaggg 1140

accgtcgtta aactcccact aacgtagaac ccagagatcg ctgcgttccc gccccctcac 1200

ccgcccgctc tcgtcatcac tgaggtggag aatagcatgc gtgaggctcc ggtgcccgtc 1260

agtgggcaga gcgcacatcg cccacagtcc ccgagaagtt gggggggaggg gtcggcaatt 1320

gaacgggtgc ctagagaagg tggcgcgggg taaactggga aagtgatgtc gtgtactggc 1380

tccgcctttt tcccgagggt gggggagaac cgtatataag tgcagtagtc gccgtgaacg 1440

ttctttttcg caacgggttt gccgccagaa cacagtctca ctctcttccg catcgctgtc 1500

tgcgagggcc agctgttggg ctcgcggttg aggacaaact cttcgcggtc tttccagtac 1560

tcttggatcg gaaacccgtc ggcctccgaa cggtactccg ccaccgaggg acctgagcga 1620

gtccgcatcg accggatcgg aaaacctctc gagaaaggcg tctaaccagt cacagtcgca 1680

aggtaggctg agcaccgtgg cgggcggcag cgggtggcgg tcggggttgt ttctggcgga 1740

ggtgctgctg atgatgtaat taaagtaggc ggtcttgaga gggcggatgg tcgaggtgag 1800

gtgtggcagg cttgagatcc agctgttggg gtgagtactc cctctcaaaa gcgggcatta 1860

cttctgcgct aagattgtca gtttccaaaa acgaggagga tttgatattc acctggcccg 1920

atctggccat acacttgagt gacaatgaca tccactttgc ctttctctcc acaggtgtcc 1980

actcccaggt ccaagtttaa agccgccacc 2010

<210> 607
<211> 2046
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 607
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacaa cctttggagc taagccagca atggtagagg 1020

gaagattctg cacgtccctt ccaggcggcc tccccgtcac cacccccccc aagcggggct 1080

gacgtcggga ggtggcctcc gtgggaaggg acacccggat cttgacacag ccttggcagc 1140

ggagtaagga agagtaggga tagattctgg ccgccctctt ggccagcttc tcgccgcccc 1200

accctccgct agggccaaga gtaattcata caaaaggagg gatcgccttc gcaaggggag 1260

agcccaggga ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag 1320

cgcgaggagc atgcgctcag ggctgagcgc ggggagagca gagcacacaa gctcatagac 1380

cctggtcgtg ggggggagga ccggggagct ggcgcggggc aaactgggaa agcggtgtcg 1440

tgtgctggct ccgccctctt cccgagggtg ggggagaacg gtatataagt gcggcagtcg 1500

ccttggacgt ttctcactct cttccgcatc gctgtctgcg agggccagct gttgggctcg 1560

cggttgagga caaactcttc gcggtctttc cagtactctt ggatcggaaa cccgtcggcc 1620

tccgaacggt actccgccac cgagggacct gagcgagtcc gcatcgaccg gatcggaaaa 1680

cctctcgaga aaggcgtcta accagtcaca gtcgcaaggt aggctgagca ccgtggcggg 1740

cggcagcggg tggcggtcgg ggttgtttct ggcggaggtg ctgctgatga tgtaattaaa 1800

gtaggcggtc ttgagagggc ggatggtcga ggtgaggtgt ggcaggcttg agatccagct 1860

gttggggtga gtactccctc tcaaaagcgg gcattacttc tgcgctaaga ttgtcagttt 1920

ccaaaaacga ggaggatttg atattcacct ggcccgatct ggccatacac ttgagtgaca 1980

atgacatcca ctttgccttt ctctccacag gtgtccactc ccaggtccaa gtttaaagcc 2040

gccacc 2046

<210> 608
<211> 2100
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 608
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga cttacggtaa atggcccgcc tggctgaccg 1020

cccaacgacc cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata 1080

gggactttcc attgacgtca atgggtggag tatttacggt aaactgccca cttggcagta 1140

catcaagtgt atcatatgcc aagtccgccc cctattgacg tcaatgacgg taaatggccc 1200

gcctggcatt atgcccagta catgacctta cgggactttc ctacttggca gtacatctac 1260

gtattagtca tcgctattac caatgacgtc gaggagaagt tccccaactt tcccgcctct 1320

cagcctttga aagaaagaaa ggggaggggg caggccgcgt gcagccgcga gcggtgctgg 1380

gctccggctc caattcccca tctcagtcgt tcccaaagtc ctcctgtttc atccaagcgt 1440

gtaagggtcc ccgtccttga ctccctagtg tcctgctgcc cacagtccag tcctgggaac 1500

cagcaccgat cacctcccat cgggccaatc tcagtccctt ccccccctacg tcggggccca 1560

cacgctcggt gcgtgcccag ttgaaccagg cggctgcgga aaaaaaaaag cggggagaaa 1620

gtagggcccg gctactagcg gttttacggg cgcacgtagc tcaggcctca agaccttggg 1680

ctgggactgg ctgagcctgg cgggaggcgg ggtccgagtc accgcctgcc gccgcgcccc 1740

cggtttctat aaattgagcc cgcagcctcc cgcttcgctc tctgctcctc ctgttcgaca 1800

gtcagccgca tcttcttttg cgtcgccagc gtctcagggg ccctggcaga actcggtaag 1860

tctgttgaca tgtatgtgat gtatactaac ctgcatggga cgtggattta cttgtgtatg 1920

tcagatagag taaagattaa ctcttgcatg tgagcggggc atcgagatag cgataaatga 1980

gtcaggagga cggatactta tatgtgttgt tatcctcctc tacagtcaaa cagattaagg 2040

ggtagcttgc ttgttctttt tgcagaagct cagaataaac gctcaacttt ggccgccacc 2100

<210> 609
<211> 2758
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 609
atattatccc taatacttgc caccccactc ttaatcagtg gtggaagaac ggtgtcagaa 60

ctgtttgttt caattggcca tttaagttta gtagtaaaag actggttaat gataacaatg 120

catcgtaaaa ccttcagaag gaaaggagaa tgttttgtgg accactttgg ttttcttttt 180

tgcgtgtggc agttttaagt tattagtttt taaaatcagt acttttttaat ggaaacaact 240

tgaccaaaaa tttgtcacag aattttgaga tccattaaaa aagttaaatg agaaacctgt 300

gtgttccttt ggtcaacacc gagacattta ggtgaaagca tatactgaga ttgagattaa 360

cttcctgtga aacccagtgt cttagacaac tgtggcttga gcaccacctg ttggtattca 420

ttacaaactt gctcactaca ataaatgaat tttaagcttt aagatgaagt ggcatttctt 480

ttaacagtta ctatgttgga attggttaca aattttggag tggactattg tatatatata 540

tcagttactg ttatggatcc cacgtcacta ttgtatactc tatattatac tctatgttat 600

actctgtaat cctactcaat aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg 660

tcttgttatc accatcaggt gacatcctcg cccaggctgt caatcatgcc ggtatcgatt 720

ccagtagcac cggccccacg ctgacaaccc actcttgcag cgttagcagc gcccctctta 780

acaagccgac ccccaccagc gtcgcggtta ctaacactcc tctccccggg gcatccgcta 840

ctcccgagct cctctggaga cggtagcatc cttaggatcg agtcaatggg aaaaacccat 900

tggagccaag tacactgact caatagggac tttccattgg gttttgccca gtacataagg 960

tcaatagggg gtgagtcaac aggaaagtcc cattggagcc aagtacattg agtcaatagg 1020

gactttccaa tgggttttgc ccagtacata aggtcaatgg gaggtaagcc aatgggtttt 1080

tcccattact gacatgtata ctgagtcatt agggactttc caatgggttt tgcccagtac 1140

ataaggtcaa taggggtgaa tcaacaggaa agtcccattg gagccaagta cactgagtca 1200

atagggactt tccattgggt tttgcccagt acaaaaggtc aatagggggt gagtcaatgg 1260

gtttttccca ttattggcac atacataagg tcaatagggg tgagtcattg ggtttttcca 1320

gccaatttat aaaacgccat gtactttccc accattgacg tcaatgggct attgaaacta 1380

atgcaacgtg acctttaaac ggtactttcc catagctgat taatgggaaa gtaccgttct 1440

cgagccaata cacgtcaatg ggaagtgaaa gggcagccaa aacgtaacac cgccccggtt 1500

ttcccctgga aattccatat tggcacgcat tctattggct gagctgcgtt ctacgtgggt 1560

ataagaggcg cgaccagcgt cggtaccgtc gcagtcttgg gtctgaccac cgtagaacgc 1620

agagctcctc gctgcagtat cctgcccaag aaagagcgac cttccccggc tactgaagcg 1680

catcggaccc gctcggttct attgggacca cgcccatccg ccatattgga acagccgcca 1740

tattggtaac gccgccatct tgattgggac caccgcccct attgggacca ccgcccaatt 1800

gggaccaccg cccacccagc gacccaggcc cagaggctac gtcaccagga cccccggctg 1860

cccagcgccc cctcgaggac acacaatgta agtagaccaa ggccttttat tggctgcggt 1920

gttaaggcaa gctgcctgtc tatccctatc tatctactat ccacctggct ctctagctcc 1980

atactgcgta cggtgtttgt tagcttaggg tgatagcaag tagaacgctg gtgatggttg 2040

ctctctatca gtttagcgct ggtgatggtg gcctccttct ccatttctta tatatatatg 2100

ctggtgatgg tccctcttcc atggccgcgg tgtgcttcgg tgccgggtac cgtaacgtgg 2160

tacagaaaaa ggcctgacac gtacgcttct ctccctagga tgctatgtgt ctgtagcacc 2220

ggcggagctt gcgagctcga tgtccaagat agagtctcca tgactgctca gattgtctcc 2280

tgtgttcaca caccagatat tacaagcgac ggccgccatg ataagtccaa aaatgagcag 2340

aatacagaat attgtactca gaggctgcag ccatcttggt ggcctgctgt ggtgctcttt 2400

tcccgtggag gactccgtca gttcctgcgt gttgttgctc gtactgcgaa gatctctctt 2460

gccccgtcct gaaaacctag gccctgacag aaaaaaggga gagttaggag agggcacaga 2520

ggattctgtc tgtgtcaagg gggcttccat gttgtttctt tacctgagat ctcttccacc 2580

agttgttttt tatcagcaac tgacaggtag tatatcaaaa tgagtgcact gatgattatt 2640

agcactgtat actttagata tcttctggtt tctgtggaca tctgttgatg ataaaaaatt 2700

atatttttt agagagcgtc tcaggggtgt gtcgtgaaaa ctacccctag ccgccacc 2758

<210> 610
<211> 4113
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 610
ggggatatta tccctaatac ttgccacccc actcttaatc agtggtggaa gaacggtgtc 60

agaactgttt gtttcaattg gccatttaag tttagtagta aaagactggt taatgataac 120

aatgcatcgt aaaaccttca gaaggaaagg agaatgtttt gtggaccact ttggttttct 180

tttttgcgtg tggcagtttt aagttattag tttttaaaat cagtactttt taatggaaac 240

aacttgacca aaaatttgtc acagaatttt gagatccatt aaaaaagtta aatgagaaac 300

ctgtgtgttc ctttggtcaa caccgagaca tttaggtgaa agcatatact gagattgaga 360

ttaacttcct gtgaaaccca gtgtcttaga caactgtggc ttgagcacca cctgttggta 420

ttcattacaa acttgctcac tacaataaat gaattttaag ctttaagatg aagtggcatt 480

tcttttaaca gttactatgt tggaattggt tacaaatttt ggagtggact attgtatata 540

tatatcagtt actgttatgg atcccacgtc actattgtat actctatatt atactctatg 600

ttatactctg taatcctact caataaacgt gtcacgcctg tgaaaccgta ctaagtctcc 660

cgtgtcttgt tatcaccatc aggtgacatc ctcgcccagg ctgtcaatca tgccggtatc 720

gattccagta gcaccggccc cacgctgaca acccactctt gcagcgttag cagcgcccct 780

cttaacaagc cgacccccac cagcgtcgcg gttactaaca ctcctctccc cggggcatcc 840

gctactcccg agctcacgcg ttacataact tacggtaaat ggcccgcctg gctgaccgcc 900

caacgacccc cgcccattga cgtcaataat gacgtatgtt cccatagtaa cgccaatagg 960

gactttccat tgacgtcaat gggtggagta tttacggtaa actgcccact tggcagtaca 1020

tcaagtgtat catatgccaa gtacgccccc tattgacgtc aatgacggta aatggcccgc 1080

ctggcattat gcccagtaca tgaccttatg ggactttcct acttggcagt acatctacgt 1140

attagtcatc gctattacca tggtcgaggt gagccccacg ttctgcttca ctctccccat 1200

ctccccccgc tccccacccc caattttgta tttatttatt ttttaattat tttgtgcagc 1260

gatgggggcg gggggggggg gggcgcgcgc caggcggggc ggggcggggc gaggggcggg 1320

gcggggcgag gcggagaggt gcggcggcag ccaatcagag cggcgcgctc cgaaagtttc 1380

cttttatggc gaggcggcgg cggcggcggc cctataaaaa gcgaagcgcg cggcgggcgg 1440

gagtcgctgc gcgctgcctt cgccccgtgc cccgctccgc cgccgcctcg cgccgcccgc 1500

cccggctctg actgaccgcg ttactcccac aggtgagcgg gcgggacggc ccttctcctc 1560

cgggctgtaa ttagcgcttg gtttaatgac ggcttgtttc ttttctgtgg ctgcgtgaaa 1620

gccttgaggg gctccgggag ggccctttgt gcgggggggag cggctcgggg ggtgcgtgcg 1680

tgtgtgtgtg cgtggggagc gccgcgtgcg gctccgcgct gcccggcggc tgtgagcgct 1740

gcgggcgcgg cgcggggctt tgtgcgctcc gcagtgtgcg cgaggggagc gcggccgggg 1800

gcggtgcccc gcggtgcggg gggggctgcg aggggaacaa aggctgcgtg cggggtgtgt 1860

gcgtgggggg gtgagcaggg ggtgtgggcg cgtcggtcgg gctgcaaccc cccctgcacc 1920

cccctccccg agttgctgag cacggcccgg cttcgggtgc ggggctccgt acggggcgtg 1980

gcgcggggct cgccgtgccg ggcgggggggt ggcggcaggt gggggtgccg ggcggggcgg 2040

ggccgcctcg ggccggggag ggctcggggg aggggcgcgg cggcccccgg agcgccggcg 2100

gctgtcgagg cgcggcgagc cgcagccatt gccttttatg gtaatcgtgc gagagggcgc 2160

agggacttcc tttgtcccaa atctgtgcgg agccgaaatc tgggaggcgc cgccgcaccc 2220

cctctagcgg gcgcggggcg aagcggtgcg gcgccggcag gaaggaaatg ggcggggagg 2280

gccttcgtgc gtcgccgcgc cgccgtcccc ttctccctct ccagcctcgg ggctgtccgc 2340

ggggggacgg ctgccttcgg gggggacggg gcagggcggg gttcggcttc tggcgtgtga 2400

ccggcggctc tagagcctct gctaaccatg ttcatgcctt cttctttttc ctacagctcc 2460

tgggcaacgt gctggttatt gtgctgtctc atcattttgg caaagaattc ggcttgatcg 2520

aagccgtctc aggggagaga ccacacccaa gctgtctaga gccgccacct tatattcccc 2580

agaacatcag gttaatggcg tttttgatgt cattttcgcg gtggctgaga tcagccactt 2640

cttccccgat aacggaaacc ggcacactgg ccatatcggt ggtcatcatg cgccagcttt 2700

catccccgat atgcaccacc gggtaaagtt cacgggagac tttatctgac agcagacgtg 2760

cactggccag ggggatcacc atccgtcgcc cgggcgtgtc aataatatca ctctgtacat 2820

ccacaaacag acgataacgg ctctctcttt tataggtgta aaccttaaac tgcatttcac 2880

cagcccctgt tctcgtcagc aaaagagccg ttcatttcaa taaaccgggc gacctcagcc 2940

atcccttcct gattttccgc tttccagcgt tcggcacgca gacgacgggc ttcattctgc 3000

atggttgtgc ttaccagacc ggagatattg acatcatata tgccttgagc aactgatagc 3060

tgtcgctgtc aactgtcact gtaatacgct gcttcatagc atacctcttt ttgacatact 3120

tcgggtatac atatcagtat atattcttat accgcaaaaa tcagcgcgca aatacgcata 3180

ctgttatctg gcttttagta agccgacgca ctttgcgccg aataaatacc tgtgacggaa 3240

gatcacttcg cagaataaat aaatcctggt gtccctgttg ataccgggaa gccctgggcc 3300

aacttttggc gaaaatgaca cgttgatcgg cacgtaagag gttccaactt tcaccataat 3360

gaaataagat cactaccggg cgtatttttt gagttatcga gattttcagg agctaaggaa 3420

gctaaaatgg agaaaaaaat cactggatat accaccgttg atatatccca atggcatcgt 3480

aaagaacatt ttgaggcatt tcagtcagtt gctcaatgta cctataacca gaccgttcag 3540

ctggatatta cggccttttt aaagaccgta aagaaaaata agcacaagtt ttatccggcc 3600

tttattcaca ttcttgcccg cctgatgaat gctcatccgg agttccgtat ggcaatgaaa 3660

gacggtgagc tggtgatatg ggatagtgtt cacccttgtt acaccgtttt ccatgagcaa 3720

actgaaacgt tttcatcgct ctggagtgaa taccacgacg atttccggca gtttctacac 3780

atatattcgc aagatgtggc gtgttacggt gaaaacctgg cctatttccc taaagggttt 3840

attgagaata tgtttttcgt gtcagccaat ccctgggtga gtttcaccag ttttgattta 3900

aacgtggcca atatggacaa cttcttcgcc cccgttttca ctatgggcaa atattatacg 3960

caaggcgaca aggtgctgat gccgctggcg attcaggttc atcatgccgt ttgtgatggc 4020

ttccatgtcg gcagaatgct taatgaatta caacagtact gcgatgagtg gcagggggg 4080

cgtaaacgcc gtgaggtctc taaaactgtc ttc 4113

<210> 611
<211> 2436
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 611
cttgctcacc tcgagtacga tagccggcta atcagccata ccacatttgt agaggtttta 60

cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt 120

gttgttgtta acttgtttat tgcagcttat aatggttaca aataaagcaa tagcatcaca 180

aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc caaactcatc 240

aatgtatctt atcatgtctg gaattcggac ggtgactgca gtgaataata aaatgtgtgt 300

ttgtccgaaa tacgcgtttt gagatttctc tggagacgct gtcgccgact aaattcatgt 360

cgcgcgatag tggtgtttat cgccgataga gatggcgata ttggaaaaat cgatatttga 420

aaatatggca tattgaaaat gtcgccgatg tgagtttctg tgtaactgat atcgccattt 480

ttccaaaagt gatttttggg catacgcgat atctggcgat agcgcttata tcgtttacgg 540

gggatggcga tagacgactt tggtgacttg ggcgattctg tgtgtcgcaa atatcgcagt 600

ttcgatatag gtgacagacg atatgaggct atatcgccga tagaggcgac atcaagctgg 660

cacatggcca atgcatatcg atctatacat tgaatcaata ttggccatta gccatattat 720

tcattggtta tatagcataa atcaatattg gctattggcc attgcatacg ttgtatccat 780

atcataatat gtacatttat attggctcat gtccaacatt accgccatgt tgacattgat 840

tattgactag ttattaatag taatcaatta cggggtcatt agttcatagc ccatatatgg 900

agttccgcgt tacataactt acggtaaatg gcccgcctgg ctgaccgccc aacgaccccc 960

gcccattgac gtcaataatg acgtatgttc ccatagtaac gccaataggg actttccatt 1020

gacgtcaatg ggtggagtat ttacggtaaa ctgcccactt ggcagtacat caagtgtatc 1080

atatgccaag tacgcccccc attgacgtca atgacggtaa atggcccgcc tggcattatg 1140

cccagtacat gaccttatgg gactttccta cttggcagta catctacgta ttagtcatcg 1200

ctattaccat ggtgatgcgg ttttggcagt acatcaatgg gcgtggatag cggtttgact 1260

cacggggatt tccaagtctc caccccattg acgtcaatgg gagtttgttt tggcaccaaa 1320

atcaacggga ctttccaaaa tgtcgtaaca actccgcccc attgacgcaa atgggcggta 1380

ggcgtgtacg gtgggaggtc tatataagca gagctcgttt agtgaaccgt cagatcgcct 1440

ggagaggcca tccacgctgt tttgacctcc atagtggaca ccgggaccga tccagcctcc 1500

gcggccggga acggtgcatt ggaacgcgga ttccccgtgc caagagtgac gtaagtaccg 1560

cctatagagt ctataggccc acccccttgg cttcttatgc atgctatact gtttttggct 1620

tggggtctat acacccccgc ttcctcatgt tataggtgat ggtatagctt agcctatagg 1680

tgtgggttat tgaccattat tgaccactcc cctattggtg acgatacttt ccattactaa 1740

tccataacat ggctctttgc cacaactctc tttattggct atatgccaat acactgtcct 1800

tcagagactg acacggactc tgtattttta caggatgggt tctcatttat tatttacaaa 1860

ttcacatata caacaccacc gtccccagtg cccgcagttt ttattaaaca taacgtggga 1920

tctccacgcg aatctcgggt acgtgttccg gacatgggtt cttctccggt agcggcggag 1980

cttctacatc cgagccctgc tcccatgcct ccagcgactc atggtcgctc ggcagctcct 2040

tgctcctaac agtggaggcc agacttaggc acagcacgat gcccaccacc accagtgtgc 2100

cgcacaaggc cgtggcggta gggtatgtgt ctgaaaatga gctcggggag cgggcttgca 2160

ccgctgacgc atttgaaaga cttaaggcag cggcagaaga agatgcaggc agctgagttg 2220

ttgtgttctg ataagagtca gaggtaactc ccgttgcggt gctgttaacg gtggagggca 2280

gtgtagtctg agcagtactc gttgctgccg cgcgcgccac cagacataat agctgacaga 2340

ctaacagact gttcctttcc atgggtcttt tctgcagtca ccgtccttga cacgcgtctc 2400

aggggcgtgt cgtgaaaact acccctagcc gccacc 2436

<210> 612
<211> 2042
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 612
atattatccc taatacttgc caccccactc ttaatcagtg gtggaagaac ggtgtcagaa 60

ctgtttgttt caattggcca tttaagttta gtagtaaaag actggttaat gataacaatg 120

catcgtaaaa ccttcagaag gaaaggagaa tgttttgtgg accactttgg ttttcttttt 180

tgcgtgtggc agttttaagt tattagtttt taaaatcagt acttttaat ggaaacaact 240

tgaccaaaaa tttgtcacag aattttgaga tccattaaaa aagttaaatg agaaacctgt 300

gtgttccttt ggtcaacacc gagacattta ggtgaaagca tatactgaga ttgagattaa 360

cttcctgtga aacccagtgt cttagacaac tgtggcttga gcaccacctg ttggtattca 420

ttacaaactt gctcactaca ataaatgaat tttaagcttt aagatgaagt ggcatttctt 480

ttaacagtta ctatgttgga attggttaca aattttggag tggactattg tatatatata 540

tcagttactg ttatggatcc cacgtcacta ttgtatactc tatattatac tctatgttat 600

actctgtaat cctactcaat aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg 660

tcttgttatc accatcaggt gacatcctcg cccaggctgt caatcatgcc ggtatcgatt 720

ccagtagcac cggccccacg ctgacaaccc actcttgcag cgttagcagc gcccctctta 780

acaagccgac ccccaccagc gtcgcggtta ctaacactcc tctccccggg gcatccgcta 840

ctcccgagct cctctggaga cggtagcatc cttaggatcg agtcaatggg aaaaacccat 900

tggagccaag tacactgact caatagggac tttccattgg gttttgccca gtacataagg 960

tcaatagggg gtgagtcaac aggaaagtcc cattggagcc aagtacattg agtcaatagg 1020

gactttccaa tgggttttgc ccagtacata aggtcaatgg gaggtaagcc aatgggtttt 1080

tcccattact gacatgtata ctgagtcatt agggactttc caatgggttt tgcccagtac 1140

ataaggtcaa taggggtgaa tcaacaggaa agtcccattg gagccaagta cactgagtca 1200

atagggactt tccattgggt tttgcccagt acaaaaggtc aataggggggt gagtcaatgg 1260

gtttttccca ttattggcac gtacataagg tcaatagggg tgagtcattg ggtttttcca 1320

gccaatttat aaaacgccat gtactttccc accattgacg tcaatgggct attgaaacta 1380

atgcaacgtg acctttaaac ggtactttcc catagctgat taatgggaaa gtaccgttct 1440

cgagccaata cacgtcaatg ggaagtgaaa gggcagccaa aacgtaacac cgccccggtt 1500

ttcccctgga aattccatat tggcacgcat tctattggct gagctgcgtt ctacgtgggt 1560

ataagaggcg cgaccagcgt cggtaccgtc gcagtcttgg gtctgaccac cgtagaacgc 1620

agagctcctc gctgctcaga tcgcctggag aggccatcca cgctgttttg acctccatag 1680

tggacaccgg gaccgatcca gcctccgcgg ccgggaacgg tgcattggaa cgcggattcc 1740

ccgtgccaag agtgacgtaa gtctgttgac atgtatgtga tgtatactaa tctgcatggg 1800

acgtggattt acttgtgtat gtcagataga gtaaagatta actcttgcat gtgagcgggg 1860

catcgagata gcgataaatg agtcaggagg acggatactt atatgtgttg ttatcctcct 1920

ctacagagcc tctgctaacc atgttcatgc cttcttcttt ttcctacagc tccgtctcag 1980

gggcaagctt gcttgttctt tttgcagaag ctcagaataa acgctcaact ttggccgcca 2040

cc 2042

<210> 613
<211> 1836
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 613
ccgcctagga ctgtatactc tatattatac tctatgttat actctgtaat cctactcaat 60

aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg tcttcttatc accatcaggt 120

gacatcctcg cccaggctgt caatcatgcc ggtatcgatt ccagtagcac cggccccacg 180

ctgacaaccc actcttgcag cgttagcagc gcccctctta acaagccgac ccccaccagc 240

gtcgcggtta ctaacactcc tctccccggg gcatccgcta ctcccgagct cgaattcgtt 300

tatcggccac cgaggccaag atctggccgc catatactga gtcattaggg actttccaat 360

gggttttgcc cagtacataa ggtcaatagg ggtgaatcaa caggaaagtc ccattggagc 420

caagtacact gagtcaatag ggactttcca ttgggttttg cccagtacaa aaggtcaata 480

gggggtgagt caatgggttt ttcccattat tggcacgtac ataaggtcaa taggggtgag 540

tcattgggtt tttccagcca atttataaaa cgccatgtac tttcccacca ttgacgtcaa 600

tgggctattg aaactaatgc aacgtgacct ttaaacggta ctttcccata gctgattaat 660

gggaaagtac cgttctcgag ccaatacacg tcaatgggaa gtgaaagggc agccaaaacg 720

taacaccgcc ccggttttcc cctggaaatt ccatattggc acgcattcta ttggctgagc 780

tgcgttctac gtgggtataa gaggcgcgac cagcgtcggt agggaccggt ttgccgccag 840

aacacaggtg aggggcgggt gtggcttccg cgggccgccg agctggaggt cctgctccga 900

gcgggccggg ccccgctgtc gtcggcgggg attagctgcg agcattcccg cttcgagttg 960

cgggcggcgc gggaggcaga gtgcgaggcc tagcggcaac cccgtagcct cgcctcgtgt 1020

ccggcttgag gcctagcgtg gtgtccgcgc cgccgccgcg tgctactccg gccgcactct 1080

ggtctttttt ttttttgttg ttgttgccct gctgccttcg attgccgttc agcaataggg 1140

gctaacaaag ggagggtgcg gggcttgctc gcccggagcc cggagaggtc atggttgggg 1200

aggaatggag ggacaggagt ggcggctggg gcccgcccgc cttcggagca catgtccgac 1260

gccacctgga tggggcgagg cctggggttt ttcccgaagc aaccaggctg gggttagcgt 1320

gccgaggcca tgtggcccca gcacccggca cgatctggct tggcggcgcc gcgttgccct 1380

gcctccctaa ctagggtgag gccatcccgt ccggcaccag ttgcgtgcgt ggaaagatgg 1440

ccgctcccgg gccctgttgc aaggagctca aaatggagga cgcggcagcc cggtggagcg 1500

ggcgggtgag tcacccacac aaaggaagag ggcctggtcc ctcaccggct gctgcttcct 1560

gtgaccccgt ggtcctatcg gccgcaatag tcacctcggg cttttgagca cggctagtcg 1620

cggcgggggg aggggatgta atggcgttgg agtttgttca catttggtgg gtggagacta 1680

gtcaggccag cctggcgctg gaagtcattt ttggaatttg tccccttgag ttttgagcgg 1740

agctaattct cgggcttctt agcggttcaa aggtatcttt taaacccttt tttaggtgtt 1800

gtgaaaacca ccgctaattc aaagcaagcc gccacc 1836

<210> 614
<211> 1923
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 614
ccgcctagga ctgtatactc tatattatac tctatgttat actctgtaat cctactcaat 60

aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg tcttcttatc accatcaggt 120

gacatcctcg cccaggctgt caatcatgcc ggtatcgatt ccagtagcac cggccccacg 180

ctgacaaccc actcttgcag cgttagcagc gcccctctta acaagccgac ccccaccagc 240

gtcgcggtta ctaacactcc tctccccggg gcatccgcta ctcccgagct cgaattcgtt 300

tatcggccac cgaggccaag atctggccgc caacttacgg taaatggccc gcctggctga 360

ccgcccaacg acccccgccc attgacgtca ataatgacgt atgttcccat agtaacgcca 420

atagggactt tccattgacg tcaatgggtg gagtatttac ggtaaactgc ccacttggca 480

gtacatcaag tgtatcatat gccaagtccg ccccctattg acgtcaatga cggtaaatgg 540

cccgcctggc attatgccca gtacatgacc ttacgggact ttcctacttg gcagtacatc 600

tacgtattag tcatcgctat taccaagtca ttgggttttt ccagccaatt tataaaacgc 660

catgtacttt cccaccattg acgtcaatgg gctattgaaa ctaatgcaac gtgaccttta 720

aacggtactt tcccatagct gattaatggg aaagtaccgt tctcgagcca atacacgtca 780

atgggaagtg aaagggcagc caaaacgtaa caccgccccg gttttcccct ggaaattcca 840

tattggcacg cattctattg gctgagctgc gttctacgtg ggtataagag gcgcgaccag 900

cgtcggtagg gaccggtttg ccgccagaac acaggtgagg ggcgggtgtg gcttccgcgg 960

gccgccgagc tggaggtcct gctccgagcg ggccgggccc cgctgtcgtc ggcggggatt 1020

agctgcgagc attcccgctt cgagttgcgg gcggcgcggg aggcagagtg cgaggcctag 1080

cggcaacccc gtagcctcgc ctcgtgtccg gcttgaggcc tagcgtggtg tccgcgccgc 1140

cgccgcgtgc tactccggcc gcactctggt ctttttttt tttgttgttg ttgccctgct 1200

gccttcgatt gccgttcagc aataggggct aacaaaggga gggtgcgggg cttgctcgcc 1260

cggagcccgg agaggtcatg gttggggagg aatggaggga caggagtggc ggctggggcc 1320

cgcccgcctt cggagcacat gtccgacgcc acctggatgg ggcgaggcct ggggtttttc 1380

ccgaagcaac caggctgggg ttagcgtgcc gaggccatgt ggccccagca cccggcacga 1440

tctggcttgg cggcgccgcg ttgccctgcc tccctaacta gggtgaggcc atcccgtccg 1500

gcaccagttg cgtgcgtgga aagatggccg ctcccgggcc ctgttgcaag gagctcaaaa 1560

tggaggacgc ggcagcccgg tggagcgggc gggtgagtca cccacacaaa ggaagagggc 1620

ctggtccctc accggctgct gcttcctgtg accccgtggt cctatcggcc gcaatagtca 1680

cctcgggctt ttgagcacgg ctagtcgcgg cgggggggagg ggatgtaatg gcgttggagt 1740

ttgttcacat ttggtgggtg gagactagtc aggccagcct ggcgctggaa gtcatttttg 1800

gaatttgtcc ccttgagttt tgagcggagc taattctcgg gcttcttagc ggttcaaagg 1860

tatcttttaa acccttttttt aggtgttgtg aaaaccaccg ctaattcaaa gcaagccgcc 1920

acc 1923

<210> 615
<211> 2494
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 615
ccgcctagga catattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 60

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 120

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 180

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttaa 240

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 300

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaagc atatactgag 360

attgagatta acttcctgtg aaacccagtg tcttagacaa ctgtggcttg agcaccacct 420

gttggtattc attacaaact tgctcactac aataaatgaa ttttaagctt taagatgaag 480

tggcatttct tttaacagtt actatgttgg aattggttac aaattttgga gtggactatt 540

gtatatatat atcagttact gttatggatc ccacgtcact attgtatact ctatattata 600

ctctatgtta tactctgtaa tcctactcaa taaacgtgtc acgcctgtga aaccgtacta 660

agtctcccgt gtcttgttat caccatcagg tgacatcctc gcccaggctg tcaatcatgc 720

cggtatcgat tccagtagca ccggccccac gctgacaacc cactcttgca gcgttagcag 780

cgcccctctt aacaagccga cccccaccag cgtcgcggtt actaacactc ctctccccgg 840

ggcatccgct actcccgagc tcgaattcgt ttatcggcca ccgaggccaa gatctggccg 900

ccaacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc cattgacgtc 960

aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt 1020

ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtcc 1080

gccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc agtacatgac 1140

cttacgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta ttaccaagtc 1200

attgggtttt tccagccaat ttataaaacg ccatgtactt tcccaccatt gacgtcaatg 1260

ggctattgaa actaatgcaa cgtgaccttt aaacggtact ttcccatagc tgattaatgg 1320

gaaagtaccg ttctcgagcc aatacacgtc aatgggaagt gaaagggcag ccaaaacgta 1380

acaccgcccc ggttttcccc tggaaattcc atattggcac gcattctatt ggctgagctg 1440

cgttctacgt gggtataaga ggcgcgacca gcgtcggtag ggaccggttt gccgccagaa 1500

cacaggtgag gggcgggtgt ggcttccgcg ggccgccgag ctggaggtcc tgctccgagc 1560

gggccgggcc ccgctgtcgt cggcggggat tagctgcgag cattcccgct tcgagttgcg 1620

ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc 1680

ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg ctactccggc cgcactctgg 1740

tctttttttt ttttgttgtt gttgccctgc tgccttcgat tgccgttcag caataggggc 1800

taacaaaggg agggtgcggg gcttgctcgc ccggagcccg gagaggtcat ggttggggag 1860

gaatggaggg acaggagtgg cggctggggc ccgcccgcct tcggagcaca tgtccgacgc 1920

cacctggatg gggcgaggcc tggggttttt cccgaagcaa ccaggctggg gttagcgtgc 1980

cgaggccatg tggccccagc acccggcacg atctggcttg gcggcgccgc gttgccctgc 2040

ctccctaact agggtgaggc catcccgtcc ggcaccagtt gcgtgcgtgg aaagatggcc 2100

gctcccgggc cctgttgcaa ggagctcaaa atggaggacg cggcagcccg gtggagcggg 2160

cgggtgagtc acccacacaa aggaagaggg cctggtccct caccggctgc tgcttcctgt 2220

gaccccgtgg tcctatcggc cgcaatagtc acctcgggct tttgagcacg gctagtcgcg 2280

gcgggggggag gggatgtaat ggcgttggag tttgttcaca tttggtgggt ggagactagt 2340

caggccagcc tggcgctgga agtcattttt ggaatttgtc cccttgagtt ttgagcggag 2400

ctaattctcg ggcttcttag cggttcaaag gtatctttta aacccttttt taggtgttgt 2460

gaaaaccacc gctaattcaa agcaagccgc cacc 2494

<210> 616
<211> 901
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 616
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc ggccgccata tactgagtca 300

ttagggactt tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg 360

aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg gttttgccca 420

gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa 480

ggtcaatagg ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc 540

ccaccattga cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt 600

cccatagctg attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga 660

aagggcagcc aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc 720

attctattgg ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaccg 780

tcgcagtctt gggtctgacc accgtagaac gcagagctcc tcgctgcagt atcctgccca 840

agaaagagcg acccgtctca ggggcttcgc aggtacaccc aagctgtcta gagccgccac 900

c 901

<210> 617
<211> 1545

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 617
ccgcctagga catattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 60

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 120

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 180

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttttaa 240

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 300

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaagc atatactgag 360

attgagatta acttcctgtg aaacccagtg tcttagacaa ctgtggcttg agcaccacct 420

gttggtattc attacaaact tgctcactac aataaatgaa ttttaagctt taagatgaag 480

tggcatttct tttaacagtt actatgttgg aattggttac aaattttgga gtggactatt 540

gtatatatat atcagttact gttatggatc ccacgtcact attgtatact ctatattata 600

ctctatgtta tactctgtaa tcctactcaa taaacgtgtc acgcctgtga aaccgtacta 660

agtctcccgt gtcttgttat caccatcagg tgacatcctc gcccaggctg tcaatcatgc 720

cggtatcgat tccagtagca ccggccccac gctgacaacc cactcttgca gcgttagcag 780

cgcccctctt aacaagccga cccccaccag cgtcgcggtt actaacactc ctctccccgg 840

ggcatccgct actcccgagc tcgaattcgt ttatcggcca ccgaggccaa gatctggccg 900

ccaacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc cattgacgtc 960

aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt 1020

ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtcc 1080

gccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc agtacatgac 1140

cttacgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta ttaccatgct 1200

gatgcggttt tggcagtaca ccaatgggcg tggatagcgg tttgactcac ggggatttcc 1260

aagtctccac cccattgacg tcaatgggag tttgttttgg caccaaaatc aacgggactt 1320

tccaaaatgt cgtaataacc ccgccccgtt gacgcaaatg ggcggtaggc gtgtacggtg 1380

ggaggtctat ataagcagag ctcgtttagt gaaccgtcag atcgcctgga gaggccatcc 1440

acgctgtttt gacctccata gtggacaccg ggaccgatcc agcctccgag cttgcttgtt 1500

ctttttgcag aagctcagaa taaacgctca actttggccg ccacc 1545

<210> 618
<211> 2101
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 618
ccgcctagga catattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 60

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 120

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 180

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttaa 240

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 300

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaagc atatactgag 360

attgagatta acttcctgtg aaacccagtg tcttagacaa ctgtggcttg agcaccacct 420

gttggtattc attacaaact tgctcactac aataaatgaa ttttaagctt taagatgaag 480

tggcatttct tttaacagtt actatgttgg aattggttac aaattttgga gtggactatt 540

gtatatatat atcagttact gttatggatc ccacgtcact attgtatact ctatattata 600

ctctatgtta tactctgtaa tcctactcaa taaacgtgtc acgcctgtga aaccgtacta 660

agtctcccgt gtcttgttat caccatcagg tgacatcctc gcccaggctg tcaatcatgc 720

cggtatcgat tccagtagca ccggccccac gctgacaacc cactcttgca gcgttagcag 780

cgcccctctt aacaagccga cccccaccag cgtcgcggtt actaacactc ctctccccgg 840

ggcatccgct actcccgagc tcgaattcgt ttatcggcca ccgaggccaa gatctggccg 900

ccagcacatc gcccacagtc cccgagaagt tgggaggggt cggcaattga accggtgcct 960

agagaaggtg gcgcggggta aactgggaaa gtgatgtcgt gtactggctc cgccttttc 1020

ccgagggtgg gggagaaccg tatataagtg cagtagtcgc cgtgaacgtt ctttttcgca 1080

acgggtttgc cgccagaaca caggtaagtg ccgtgtgtgg ttcccgcggg cctggcctct 1140

ttacgggtta tggcccttgc gtgccttgaa ttacttccac ctggctccag tacgtgattc 1200

ttgatcccga gctggagcca ggggcgggcc ttgcgcttta ggagcccctt cgcctcgtgc 1260

ttgagttgag gcctggcctg ggcgctgggg ccgccgcgtg cgaatctggt ggcaccttcg 1320

cgcctgtctc gctgctttcg ataagtctct agccatttaa aatttttgat gacgtgctgc 1380

gacgcttttt ttctggcaag atagtcttgt aaatgcgggc caggatctgc acactggtat 1440

ttcggttttt gggcccgcgg ccggcgacgg ggcccgtgcg tcccagcgca catgttcggc 1500

gaggcggggc ctgcgagcgc ggccaccgag aatcggacgg gggtagtctc aagctggccg 1560

gcctgctctg gtgcctggcc tcgcgccgcc gtgtatcgcc ccgccctggg cggcaaggct 1620

ggcccggtcg gcaccagttg cgtgagcgga aagatggccg cttcccggcc ctgctccagg 1680

gggctcaaaa tggaggacgc ggcgctcggg agagcgggcg ggtgagtcac ccacacaaag 1740

gaaaagggcc tttccgtcct cagccgtcgc ttcatgtgac tccacggagt accgggcgcc 1800

gtccaggcac ctcgattagt tctggagctt ttggagtacg tcgtctttag gttgggggga 1860

ggggttttat gcgatggagt ttccccacac tgagtgggtg gagactgaag ttaggccagc 1920

ttggcacttg atgtaattct ccttggaatt tggccttttt gagtttggat cttggttcat 1980

tctcaagcct cagacagtgg ttcaaagttt ttttcttcca tttcaggtgt cgtgaacacc 2040

atctattgct tacatttgct tctgacacaa ctgtgttcac tagcaacctc aaacagacac 2100

c 2101

<210> 619
<211> 2485
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 619
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag atagactctg ggtagaatgt tctgtttcct 420

gtaatataaa atcataaagt gatgatatta tcaagtgaaa aggaaatgtg gtaccttaat 480

ctttccacat caagccaata tcatgctgaa ggccagagaa tctttttttgc taaaaaacac 540

aatacagata taattaatag ttatcattta tgtttgatat taatcatatg aatataatta 600

atatgtttta ttgtatcgat tattgttgat attaatgtaa ttactactaa tacataacaa 660

atataactaa tggttatggc tcagtaacta aggtaagata taagctacac tggtaaagaa 720

agatcaatat tgcttcagag tacactgaag taaatgaata acttaaccgg tctaggttgt 780

cacttatatt tatacgaaac ttgatctgtc gccgcaattc aagcttcgtg aggctccggt 840

gcccgtcagt gacctgctat agaaacttga tctgtcgccg caattcaagc ttcgtgaggc 900

tccggtgccc gtcagtgacc tgctatactc tgagcggggc tgacgtcggg aggtggcctc 960

cgtgggaagg gacacccgga tcttgacaca gccttggcag cggagtaagg aagagtaggg 1020

atagattctg gccgccctct tggccagctt ctcgccgccc caccctccgc tagggccaag 1080

agtaattcat acaaaaggag ggatcgcctt cgcaagggga gagcccaggg accgtcccta 1140

aattctcaca gacccaaatc cctgtagccg ccccacgaca gcgcgaggag catgcgctca 1200

gggctgagcg cggggagagc agagcacaca agctcataga ccctggtcgt gggggggagg 1260

accggggagc tggcgcgggg caaactggga aagcggtgtc gtgtgctggc tccgccctct 1320

tcccgagggt gggggagaac ggtatataag tgcggcagtc gccttggacg ttctttttcg 1380

caacgggttt gccgtcagaa cgcaggtgag gggcgggtgt ggcttccgcg ggccgccgag 1440

ctggaggtcc tgctccgagc gggccgggcc ccgctgtcgt cggcggggat tagctgcgag 1500

cattcccgct tcgagttgcg ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc 1560

cgtagcctcg cctcgtgtcc ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg 1620

ctactccggc cgcactctgg tctttttttt ttttgttgtt gttgccctgc tgccttcgat 1680

tgccgttcag caataggggc taacaaaggg agggtgcggg gcttgctcgc ccggagcccg 1740

gagaggtcat ggttggggag gaatggaggg acaggagtgg cggctggggc ccgcccgcct 1800

tcggagcaca tgtccgacgc cacctggatg gggcgaggcc tggggttttt cccgaagcaa 1860

ccaggctggg gttagcgtgc cgaggccatg tggccccagc acccggcacg atctggcttg 1920

gcggcgccgc gttgccctgc ctccctaact agggtgaggc catcccgtcc ggcaccagtt 1980

gcgtgcgtgg aaagatggcc gctcccgggc cctgttgcaa ggagctcaaa atggaggacg 2040

cggcagcccg gtggagcggg cgggtgagtc acccacacaa aggaagaggg cctggtccct 2100

caccggctgc tgcttcctgt gaccccgtgg tcctatcggc cgcaatagtc acctcgggct 2160

tttgagcacg gctagtcgcg gcgggggggag gggatgtaat ggcgttggag tttgttcaca 2220

tttggtgggt ggagactagt caggccagcc tggcgctgga agtcattttt ggaatttgtc 2280

cccttgagtt ttgagcggag ctaattctcg ggcttcttag cggttcaaag gtatctttta 2340

aacccttttt taggtgttgt gaaaaccacc gctaattcaa agcaagcagg agcccgggct 2400

gggcataaaa gtcagggcag agccatctat tgcttacatt tgcttctgac acaactgtgt 2460

tcactagcaa cctcaaacag acacc 2485

<210> 620
<211> 2772
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 620
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag atagactctg ggtagaatgt tctgtttcct 420

gtaatataaa atcataaagt gatgatatta tcaagtgaaa aggaaatgtg gtaccttaat 480

ctttccacat caagccaata tcatgctgaa ggccagagaa tctttttgc taaaaaacac 540

aatacagata taattaatag ttatcattta tgtttgatat taatcatatg aatataatta 600

atatgtttta ttgtatcgat tattgttgat attaatgtaa ttactactaa tacataacaa 660

atataactaa tggttatggc tcagtaacta aggtaagata taagctacac tggtaaagaa 720

agatcaatat tgcttcagag tacactgaag taaatgaata acttaaccgg tctaggttgt 780

cacttatatt tatacaacat tttaagaact aagaacctct cttctatgct tagtagatga 840

acaaaatcat gtaatagatg aatgaggcca ggaagtacaa aggtttacaa aattgccaag 900

ccactctggg gtgattttat gagtaatgcg gcatttggta gcttgcctta aagaatatta 960

ttggacatta tcaagtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtaactgaac 1020

tctcttgtag tttcattttt gtttgaaaaa gacatgtatc tcatgtagcc caggctggaa 1080

tcgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc cgtcagtgac 1140

ctgctataga aacttgatct gtcgccgcaa ttcaagcttc gtgaggctcc ggtgcccgtc 1200

agtgacctgc tatactctga gcggggctga cgtcgggagg tggcctccgt gggaagggac 1260

acccggatct tgacacagcc ttggcagcgg agtaaggaag agtagggata gattctggcc 1320

gccctcttgg ccagcttctc gccgccccac cctccgctag ggccaagagt aattcataca 1380

aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat tctcacagac 1440

ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgctcaggg ctgagcgcgg 1500

ggagagcaga gcacacaagc tcatagaccc tggtcgtggg ggggaggacc ggggagctgg 1560

cgcggggcaa actgggaaag cggtgtcgtg tgctggctcc gccctcttcc cgagggtggg 1620

ggagaacggt atataagtgc ggcagtcgcc ttggacgttc ttttcgcaa cgggtttgcc 1680

gtcagaacgc aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg gaggtcctgc 1740

tccgagcggg ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat tcccgcttcg 1800

agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt agcctcgcct 1860

cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta ctccggccgc 1920

actctggtct ttttttttt tgttgttgtt gccctgctgc cttcgattgc cgttcagcaa 1980

taggggctaa caaagggagg gtgcggggct tgctcgcccg gagcccggag aggtcatggt 2040

tggggaggaa tggagggaca ggagtggcgg ctggggcccg cccgccttcg gagcacatgt 2100

ccgacgccac ctggatgggg cgaggcctgg ggtttttccc gaagcaacca ggctggggtt 2160

agcgtgccga ggccatgtgg ccccagcacc cggcacgatc tggcttggcg gcgccgcgtt 2220

gccctgcctc cctaactagg gtgaggccat cccgtccggc accagttgcg tgcgtggaaa 2280

gatggccgct cccgggccct gttgcaagga gctcaaaatg gaggacgcgg cagcccggtg 2340

gagcgggcgg gtgagtcacc cacacaaagg aagagggcct ggtccctcac cggctgctgc 2400

ttcctgtgac cccgtggtcc tatcggccgc aatagtcacc tcgggctttt gagcacggct 2460

agtcgcggcg gggggagggg atgtaatggc gttggagttt gttcacattt ggtgggtgga 2520

gactagtcag gccagcctgg cgctggaagt cattttgga atttgtcccc ttgagttttg 2580

agcggagcta attctcgggc ttcttagcgg ttcaaaggta tcttttaaac ccttttttag 2640

gtgttgtgaa aaccaccgct aattcaaagc aagcaggagc ccgggctggg cataaaagtc 2700

agggcagagc catctattgc ttacatttgc ttctgacaca actgtgttca ctagcaacct 2760

caaacagaca cc 2772

<210> 621
<211> 2831
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 621
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cagctggact ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagta tacatcgttt ccatggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcgggg gaggctaact gaaacacgga aggagacaat accggaagga acccgcgcta 780

tgacggcaat aaaaagacag aataaaacgc acgggtgttg ggtcgtttgt tcataaacgc 840

ggggttcggt cccagggctg gcactctgtc gataccccac cgagtcccca ttggggccaa 900

tacgcccgcg tttcttcctt ttccccaccc cacccccaa gttcgggtga aggcccaggg 960

ctcgcagcca acgtcggggc ggcaggccct gccatagaaa tcgataatat atggtagggt 1020

tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg agtcgggcgc 1080

gccaaaatga agtgaagttc ctatactttc tagagcgagc tcacggggac agcccccccc 1140

caaagccccc agggatgtaa ttacgtccct cccccgctag ggggcagcag cgagccgccc 1200

ggggctccgc tccggtccgg cgctcccccc gcatccccga gccggcagcg tgcggggaca 1260

gcccgggcac ggggaaggtg gcacgggatc gctttcctct gaacgcttct cgctgctctt 1320

tgagcctgca gacacctggg gggatacggg gaaaaagctt taggctgaaa gagagattta 1380

gaatgacagg caacctttgg agctaagcca gcaatggtag agggaagatt ctgcacgtcc 1440

cttccaggcg gcctccccgt caccaccccc cccaacccgc cccgaccgga gctgagagta 1500

attcatacaa aaggactcgc ccctgccttg gggaatccca gggaccgtcg ttaaactccc 1560

actaacgtag aacccagaga tcgctgcgtt cccgcccccc cacccgcccg ctctcgtcat 1620

cactgaggtg gagaatagca tgcgtgaggc tccggtgccc gtcagtgggc agagcgcaca 1680

tcgcccacag tccccgagaa gttgggggga ggggtcggca attgaacggg tgcctagaga 1740

aggtggcgcg gggtaaactg ggaaagtgat gtcgtgtact ggctccgcct ttttcccgag 1800

ggtgggggag aaccgtatat aagtgcagta gtcgccgtga acgttctttt tcgcaacggg 1860

tttgccgcca gaacacaggt aagtgccgtg tgtggttccc gcgggcctgg cctctttacg 1920

ggttatggcc cttgcgtgcc ttgaattact tccacctggc tccagtacgt gattcttgat 1980

cccgagctgg agccaggggc gggccttgcg ctttaggagc cccttcgcct cgtgcttgag 2040

ttgaggcctg gcctgggcgc tggggccgcc gcgtgcgaat ctggtggcac cttcgcgcct 2100

gtctcgctgc tttcgataag tctctagcca tttaaaattt ttgatgacgt gctgcgacgc 2160

tttttttctg gcaagatagt cttgtaaatg cgggccagga tctgcacact ggtatttcgg 2220

tttttgggcc cgcggccggc gacggggccc gtgcgtccca gcgcacatgt tcggcgaggc 2280

ggggcctgcg agcgcggcca ccgagaatcg gacgggggta gtctcaagct ggccggcctg 2340

ctctggtgcc tggcctcgcg ccgccgtgta tcgccccgcc ctgggcggca aggctggccc 2400

ggtcggcacc agttgcgtga gcggaaagat ggccgcttcc cggccctgct ccagggggct 2460

caaaatggag gacgcggcgc tcgggagagc gggcgggtga gtcacccaca caaaggaaaa 2520

gggcctttcc gtcctcagcc gtcgcttcat gtgactccac ggagtaccgg gcgccgtcca 2580

ggcacctcga ttagttctgg agcttttgga gtacgtcgtc tttaggttgg ggggaggggt 2640

tttatgcgat ggagtttccc cacactgagt gggtggagac tgaagttagg ccagcttggc 2700

acttgatgta attctccttg gaatttggcc tttttgagtt tggatcttgg ttcattctca 2760

agcctcagac agtggttcaa agtttttttc ttccatttca ggtgtcgtga aaactacccc 2820

taaaagccac c 2831

<210> 622
<211> 2890
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 622
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cagctggact ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagta tacatcgttt ccatggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcgggg gaggctaact gaaacacgga aggagacaat accggaagga acccgcgcta 780

tgacggcaat aaaaagacag aataaaacgc acgggtgttg ggtcgtttgt tcataaacgc 840

ggggttcggt cccagggctg gcactctgtc gataccccac cgagtcccca ttggggccaa 900

tacgcccgcg tttcttcctt ttccccaccc cacccccaa gttcgggtga aggcccaggg 960

ctcgcagcca acgtcggggc ggcaggccct gccatagaaa tcgataatat atggtagggt 1020

tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg agtcgggcgc 1080

gccaaaatga agtgaagttc ctatactttc tagagcgagc tcacggggac agcccccccc 1140

caaagccccc agggatgtaa ttacgtccct cccccgctag ggggcagcag cgagccgccc 1200

ggggctccgc tccggtccgg cgctcccccc gcatccccga gccggcagcg tgcggggaca 1260

gcccgggcac ggggaaggtg gcacgggatc gctttcctct gaacgcttct cgctgctctt 1320

tgagcctgca gacacctggg gggatacggg gaaaaagctt taggctgaaa gagagattta 1380

gaatgacagc ctctcccggc cagaggagca aggtatgcgg gaggcgacca ggaggatagc 1440

ggggctgacg tcgggaggtg gcctccgtgg gaaggacacc cggatcttga cacagccttg 1500

gcagcggagt caggaagagt aggggtaggt tctggacgcc ctcttggcca gctcatcgcc 1560

gccccaccct ctgctggagc acagagtaat tcatacaaaa ggagggatcg ccttcgcaag 1620

gggagagccc agggaccgtc cctaaattct cacagaccca aatccctgta gccgccccac 1680

gacagcgcga ggagcatgcg cccagggctg agcgcgggta gatcagagca cacaagctca 1740

cagtccccgg cggtgggggg aggggcgcgc tgagcggggg ccagggagct ggcgcggggc 1800

aaactgggaa agtggtgtcg tgtgctggct ccgccctctt cccgagggtg ggggagaacg 1860

gtatataagt gcggtagtcg ccttggacgt tctttttcgc aacgggtttg ccgtcagaac 1920

gcaggtgagt ggcgggtgtg gcttccgcgg gccccggagc tggagccctg ctctgagcgg 1980

gccgggctga tatgcgagtg tcgtccgcag ggtttagctg tgagcattcc cacttcgagt 2040

ggcgggcggt gcgggggtga gagtgcgagg cctagcggca accccgtagc ctcgcctcgt 2100

gtccggcttg aggcctagcg tggtgtccgc cgccgcgtgc cactccggcc gcactatgcg 2160

ttttttgtcc ttgctgccct cgattgcctt ccagcagcat gggctaacaa agggagggtg 2220

tggggctcac tcttaaggag cccatgaagc ttacgttgga taggaatgga agggcaggag 2280

gggcgactgg ggcccgcccg ccttcggagc acatgtccga cgccacctgg atggggcgag 2340

gcctgtggct ttccgaagca atcgggcgtg agtttagcct acctgggcca tgtggcccta 2400

gcactgggca cggtctggcc tggcggtgcc gcgttccctt gcctcccaac aagggtgagg 2460

ccgtcccgcc cggcaccagt tgcttgcgcg gaaagatggc cgctcccggg gccctgttgc 2520

aaggagctca aaatggagga cgcggcagcc cggtggagcg ggcgggtgag tcacccacac 2580

aaaggaagag ggccttgccc ctcgccggcc gctgcttcct gtgaccccgt ggtctatcgg 2640

ccgcatagtc acctcgggct tctcttgagc accgctcgtc gcggcggggg gaggggatct 2700

aatggcgttg gagtttgttc acatttggtg ggtggagact agtcaggcca gcctggcgct 2760

ggaagtcatt cttggaattt gccccctttga gtttggagcg aggctaattc tcaagcctct 2820

tagcggttca aaggtatttt ctaaacccgt ttccaggtgt tgtgaaagcc accgctaatt 2880

caaagcaacc 2890

<210> 623
<211> 2844
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 623
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

cccctttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cagctggact ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagta tacatcgttt ccatggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcgggg gaggctaact gaaacacgga aggagacaat accggaagga acccgcgcta 780

tgacggcaat aaaaagacag aataaaacgc acgggtgttg ggtcgtttgt tcataaacgc 840

ggggttcggt cccagggctg gcactctgtc gataccccac cgagtcccca ttggggccaa 900

tacgcccgcg tttcttcctt ttccccaccc cacccccaa gttcgggtga aggcccaggg 960

ctcgcagcca acgtcggggc ggcaggccct gccatagaaa tcgataatat atggtagggt 1020

tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg agtcgggcgc 1080

gccaaaatga agtgaagttc ctatactttc tagagcgagc tcacggggac agcccccccc 1140

caaagccccc agggatgtaa ttacgtccct cccccgctag ggggcagcag cgagccgccc 1200

ggggctccgc tccggtccgg cgctcccccc gcatccccga gccggcagcg tgcggggaca 1260

gcccgggcac ggggaaggtg gcacgggatc gctttcctct gaacgcttct cgctgctctt 1320

tgagcctgca gacacctggg gggatacggg gaaaaagctt taggctgaaa gagagattta 1380

gaatgacaga gcggggctga cgtcgggagg tggcctccgt gggaagggac acccggatct 1440

tgacacagcc ttggcagcgg agtaaggaag agtagggata gattctggcc gccctcttgg 1500

ccagcttctc gccgccccac cctccgctag ggccaagagt aattcataca aaaggaggga 1560

tcgccttcgc aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct 1620

gtagccgccc cacgacagcg cgaggagcat gcgctcaggg ctgagcgcgg ggagagcaga 1680

gcacacaagc tcatagaccc tggtcgtggg ggggaggacc ggggagctgg cgcggggcaa 1740

actgggaaag cggtgtcgtg tgctggctcc gccctcttcc cgagggtggg ggagaacggt 1800

atataagtgc ggcagtcgcc ttggacgttc tttttcgcaa cgggtttgcc gtcagaacgc 1860

aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg gaggtcctgc tccgagcggg 1920

ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat tcccgcttcg agttgcgggc 1980

ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt agcctcgcct cgtgtccggc 2040

ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta ctccggccgc actctggtct 2100

ttttttttt tgttgttgtt gccctgctgc cttcgattgc cgttcagcaa taggggctaa 2160

caaagggagg gtgcggggct tgctcgcccg gagcccggag aggtcatggt tggggaggaa 2220

tggagggaca ggagtggcgg ctggggcccg cccgccttcg gagcacatgt ccgacgccac 2280

ctggatgggg cgaggcctgg ggtttttccc gaagcaacca ggctggggtt agcgtgccga 2340

ggccatgtgg ccccagcacc cggcacgatc tggcttggcg gcgccgcgtt gccctgcctc 2400

cctaactagg gtgaggccat cccgtccggc accagttgcg tgcgtggaaa gatggccgct 2460

cccgggccct gttgcaagga gctcaaaatg gaggacgcgg cagcccggtg gagcgggcgg 2520

gtgagtcacc cacacaaagg aagagggcct ggtccctcac cggctgctgc ttcctgtgac 2580

cccgtggtcc tatcggccgc aatagtcacc tcgggctttt gagcacggct agtcgcggcg 2640

ggggggagggg atgtaatggc gttggagttt gttcacattt ggtgggtgga gactagtcag 2700

gccagcctgg cgctggaagt cattttgga atttgtcccc ttgagttttg agcggagcta 2760

attctcgggc ttcttagcgg ttcaaaggta tcttttaaac ccttttttag gtgttgtgaa 2820

aaccaccgct aattcaaagc aacc 2844

<210> 624
<211> 2858
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 624
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cagctggact ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagta tacatcgttt ccatggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcgggg gaggctaact gaaacacgga aggagacaat accggaagga acccgcgcta 780

tgacggcaat aaaaagacag aataaaacgc acgggtgttg ggtcgtttgt tcataaacgc 840

ggggttcggt cccagggctg gcactctgtc gataccccac cgagtcccca ttggggccaa 900

tacgcccgcg tttcttcctt ttccccaccc cacccccaa gttcgggtga aggcccaggg 960

ctcgcagcca acgtcggggc ggcaggccct gccatagaaa tcgataatat atggtagggt 1020

tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg agtcgggcgc 1080

gccaaaatga agtgaagttc ctatactttc tagagcgagc tcacggggac agcccccccc 1140

caaagccccc agggatgtaa ttacgtccct cccccgctag ggggcagcag cgagccgccc 1200

ggggctccgc tccggtccgg cgctcccccc gcatccccga gccggcagcg tgcggggaca 1260

gcccgggcac ggggaaggtg gcacgggatc gctttcctct gaacgcttct cgctgctctt 1320

tgagcctgca gacacctggg gggatacggg gaaaaagctt taggctgaaa gagagattta 1380

gaatgacaga cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt 1440

gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca 1500

atgggtggag tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc 1560

aagtccgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta 1620

catgacctta cgggactttc ctacttggca gtacatctac gtattagtca tcgctattac 1680

cagcacatcg cccacagtcc ccgagaagtt ggggggaggg gtcggcaatt gaaccggtgc 1740

ctagagaagg tggcgcgggg taaactggga aagtgatgtc gtgtactggc tccgcctttt 1800

tcccgagggt gggggagaac cgtatataag tgcagtagtc gccgtgaacg ttcttttttcg 1860

caacgggttt gccgccagaa cacaggtaag tgccgtgtgt ggttcccgcg ggcctggcct 1920

ctttacgggt tatggccctt gcgtgccttg aattacttcc acctggctcc agtacgtgat 1980

tcttgatccc gagctggagc caggggcggg ccttgcgctt taggagcccc ttcgcctcgt 2040

gcttgagttg aggcctggcc tgggcgctgg ggccgccgcg tgcgaatctg gtggcacctt 2100

cgcgcctgtc tcgctgcttt cgataagtct ctagccattt aaaatttttg atgacgtgct 2160

gcgacgcttt ttttctggca agatagtctt gtaaatgcgg gccaggatct gcacactggt 2220

atttcggttt ttgggcccgc ggccggcgac ggggcccgtg cgtcccagcg cacatgttcg 2280

gcgaggcggg gcctgcgagc gcggccaccg agaatcggac gggggtagtc tcaagctggc 2340

cggcctgctc tggtgcctgg cctcgcgccg ccgtgtatcg ccccgccctg ggcggcaagg 2400

ctggcccggt cggcaccagt tgcgtgagcg gaaagatggc cgcttcccgg ccctgctcca 2460

ggggggctcaa aatggaggac gcggcgctcg ggagagcggg cgggtgagtc acccacacaa 2520

aggaaaaggg cctttccgtc ctcagccgtc gcttcatgtg actccacgga gtaccgggcg 2580

ccgtccaggc acctcgatta gttctggagc ttttggagta cgtcgtcttt aggttggggg 2640

gaggggtttt atgcgatgga gtttccccac actgagtggg tggagactga agttaggcca 2700

gcttggcact tgatgtaatt ctccttggaa tttggccttt ttgagtttgg atcttggttc 2760

attctcaagc ctcagacagt ggttcaaagt ttttttcttc catttcagac atttgcttct 2820

gacacaactg tgttcactag caacctcaaa cagacacc 2858

<210> 625
<211> 1083
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 625
attatcccta atacctgcca ccccactctt aatcagtggt ggaagaacgg tgtcagaact 60

gtttgtttca attggccatt taagtttagt agtaaaagac tggttaatga taacaatgca 120

tcgtaaaacc ttcagaagga aaggagaatg ttttgtggac cactttggtt ttctttttg 180

cgtgtggcag ttttaagtta ttagttttta aaatcagtac tttttaatgg aaacaacttg 240

accaaaaatt tgtcacagaa ttttgacacc cattaaaaaa gttaaatgag aaacctgtgt 300

gttcctttgg agaggggcgg aagggacgtt aggagggagg cagggaggca gggaggcagg 360

gaggaacgga gggaggaaac ttgatctgtc gccgcaattc aagcttcgtg aggctccggt 420

gcccgtcagt gacctgctat aacttacggt aaatggcccg cctggctgac cgcccaacga 480

cccccgccca ttgacgtcaa taatgacgta tgttcccata gtaacgccaa tagggacttt 540

ccattgacgt caatgggtgg agtatttacg gtaaactgcc cacttggcag tacatcaagt 600

gtatcatatg ccaagtccgc cccctattga cgtcaatgac ggtaaatggc ccgcctggca 660

ttatgcccag tacatgacct tacgggactt tcctacttgg cagtacatct acgtattagt 720

catcgctatt accatgctga tgcggttttg gcagtacacc aatgggcgtg gatagcggtt 780

tgactcacgg ggatttccaa gtctccaccc cattgacgtc aatgggagtt gttttggca 840

ccaaaatcaa cgggactttc caaaatgtcg taataacccc gccccgttga cgcaaatggg 900

cggtaggcgt gtacggtggg aggtctatat aagcagagct cgtttagtga accgtcagat 960

cgcctggaga ggccatccac gctgttttga cctccatagt ggacaccggg accgatccag 1020

cctccgagct tgcttgttct ttttgcagaa gctcagaata aacgctcaac tttggccgcc 1080

acc 1083

<210> 626
<211> 1503
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 626
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag atagactctg ggtagaatgt tctgtttcct 420

gtaatataaa atcataaagt gatgatatta tcaagtgaaa aggaaatgtg gtaccttaat 480

ctttccacat caagccaata tcatgctgaa ggccagagaa tctttttttgc taaaaaacac 540

aatacagata taattaatag ttatcattta tgtttgatat taatcatatg aatataatta 600

atatgtttta ttgtatcgat tattgttgat attaatgtaa ttactactaa tacataacaa 660

atataactaa tggttatggc tcagtaacta aggtaagata taagctacac tggtaaagaa 720

agatcaatat tgcttcagag tacactgaag taaatgaata acttaaccgg tctaggttgt 780

cacttatatt tatacgaaac ttgatctgtc gccgcaattc aagcttcgtg aggctccggt 840

gcccgtcagt gacctgctat aacttacggt aaatggcccg cctggctgac cgcccaacga 900

cccccgccca ttgacgtcaa taatgacgta tgttcccata gtaacgccaa tagggacttt 960

ccattgacgt caatgggtgg agtatttacg gtaaactgcc cacttggcag tacatcaagt 1020

gtatcatatg ccaagtccgc cccctattga cgtcaatgac ggtaaatggc ccgcctggca 1080

ttatgcccag tacatgacct tacgggactt tcctacttgg cagtacatct acgtattagt 1140

catcgctatt accatgctga tgcggttttg gcagtacacc aatgggcgtg gatagcggtt 1200

tgactcacgg ggatttccaa gtctccaccc cattgacgtc aatgggagtt tgttttggca 1260

ccaaaatcaa cgggactttc caaaatgtcg taataacccc gccccgttga cgcaaatggg 1320

cggtaggcgt gtacggtggg aggtctatat aagcagagct cgtttagtga accgtcagat 1380

cgcctggaga ggccatccac gctgttttga cctccatagt ggacaccggg accgatccag 1440

cctccgagct tgcttgttct ttttgcagaa gctcagaata aacgctcaac tttggccgcc 1500

acc 1503

<210> 627
<211> 991
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 627
atctgtatac tctatattat actctatgtt atactctgta atcctactca ataaacgtgt 60

cacgcctgtg aaaccgtact aagtctcccg tgtcttctta tcaccatcag gtgacatcct 120

cgcccaggct gtcaatcatg ccggtatcga ttccagtagc accggcccca cgctgacaac 180

ccactcttgc agcgttagca gcgcccctct taacaagccg acccccacca gcgtcgcggt 240

tactaacact cctctccccg gggcatccgc tactcccgag ctcgaaactt gatctgtcgc 300

cgcaattcaa gcttcgtgag gctccggtgc ccgtcagtga cctgctataa cttacggtaa 360

atggcccgcc tggctgaccg cccaacgacc cccgcccatt gacgtcaata atgacgtatg 420

ttcccatagt aacgccaata gggactttcc attgacgtca atgggtggag tatttacggt 480

aaactgccca cttggcagta catcaagtgt atcatatgcc aagtccgccc cctattgacg 540

tcaatgacgg taaatggccc gcctggcatt atgcccagta catgacctta cgggactttc 600

ctacttggca gtacatctac gtattagtca tcgctattac catgctgatg cggttttggc 660

agtacaccaa tgggcgtgga tagcggtttg actcacgggg atttccaagt ctccacccca 720

ttgacgtcaa tgggagtttg ttttggcacc aaaatcaacg ggactttcca aaatgtcgta 780

ataaccccgc cccgttgacg caaatgggcg gtaggcgtgt acggtgggag gtctatataa 840

gcagagctcg tttagtgaac cgtcagatcg cctggagagg ccatccacgc tgttttgacc 900

tccatagtgg acaccgggac cgatccagcc tccgagcttg cttgttcttt ttgcagaagc 960

tcagaataaa cgctcaactt tggccgccac c 991

<210> 628
<211> 1476
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 628
cttgctcacc tcgagtacga tagccggcta atcagccata ccacatttgt agaggtttta 60

cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt 120

gttgttgtta acttgtttat tgcagcttat aatggttaca ataaagcaa tagcatcaca 180

aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc caaactcatc 240

aatgtatctt atcatgtctg gaattcggac ggtgactgca gtgaataata aaatgtgtgt 300

ttgtccgaaa tacgcgtttt gagatttctc tggagtcgct gtcgccgact aaattcatgt 360

cgcgcgatag tggtgtttat cgccgataga gatggcgata ttggaaaaat cgatatttga 420

aaatatggca tattgaaaat gtcgccgatg tgagtttctg tgtaactgat atcgccattt 480

ttccaaaagt gatttttggg catacgcgat atctggcgat agcgcttata tcgtttacgg 540

gggatggcga tagacgactt tggtgacttg ggcgattctg tgtgtcgcaa atatcgcagt 600

ttcgatatag gtgacagacg atatgaggct atatcgccga tagaggcgac atcaagctgg 660

cacatggcca atgcatatcg atctatacat tgaatcaata ttggccatta gccatattat 720

tcattggtta tatagcataa atcaatattg gctattggcc attgcatacg ttgtatccat 780

atcataatat gtacatttat attggctcat gtccaacatt accgccatgt tgacacttac 840

ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac 900

gtatgttccc atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt 960

acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagtc cgcccccctat 1020

tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttacggga 1080

ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccatgc tgatgcggtt 1140

ttggcagtac accaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca 1200

ccccattgac gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg 1260

tcgtaataac cccgccccgt tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta 1320

tataagcaga gctcgtttag tgaaccgtca gatcgcctgg agaggccatc cacgctgttt 1380

tgacctccat agtggacacc gggaccgatc cagcctccga gcttgcttgt tctttttgca 1440

gaagctcaga ataaacgctc aactttggcc gccacc 1476

<210> 629
<211> 2277
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 629
cttgctcacc tcgagtacga tagccggcta atcagccata ccacatttgt agaggtttta 60

cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt 120

gttgttgtta acttgtttat tgcagcttat aatggttaca ataaaagcaa tagcatcaca 180

aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc caaactcatc 240

aatgtatctt atcatgtctg gtattcggac ggtgacgata tttgaaaata tggcatattg 300

aaaatgtcgc cgatgtgagt ttctgtgtaa ctgatatcgc catttttcca aaagtgattt 360

ttgggcatac gcgatatctg gcgatagcgc ttatatcgtt tacgggggat ggcgatagac 420

gactttggtg acttgggcga ttctgtgtgt cgcaaatatc gcagtttcga tataggtgac 480

agacgatatg aggctatatc gccgatagag gcgacatcaa gctggcacat ggccaatgca 540

tatcgatcta tacattgaat caatattggc cattagccat attattcatt ggttatatag 600

cataaatcaa tattggctat tggccattgc atacgttgta tccatatcat aatatgtaca 660

tttatattgg ctcatgtcca acattaccgc catgttgaca ttgattattg actagttatt 720

aatagtaatc aattacgggg tcattagttc atagcccata tatggagttc cgcgttacat 780

aacttacggt aaatggcccg cctggctgac cgcccaacga cccccgccca ttgacgtcaa 840

taatgacgta tgttcccata gtaacgccaa tagggacttt ccattgacgt caatgggtgg 900

agtatttacg gtaaactgcc cacttggcag tacatcaagt gtatcatatg ccaagtacgc 960

cccctattga cgtcaatgac ggtaaatggc ccgcctggca ttatgcccag tacatgacct 1020

tatgggactt tcctacttgg cagtacatct acgtattagt catcgctatt accatggtga 1080

tgcggttttg gcagtacatc aatgggcgtg gatagcggtt tgactcacgg ggatttccaa 1140

gtctccaccc cattgacgtc aatgggagtt tgttttggca ccaaaatcaa cgggactttc 1200

caaaatgtcg taacaactcc gccccattga cgcaaatggg cggtaggcgt gtacggtggg 1260

aggtctatat aagcagagct cgtttagtga accgtcagat cgcctggaga cgccatccac 1320

gctgttttga cctccataga agataccggg accgatccag cctccgcggc cgggaacggt 1380

gcattggaac gcggattccc cgtgccaaga gtgacgtaag taccgcctat agagtctata 1440

ggcccacccc cttggcttct tatgcatgct atactgtttt tggcttgggg tctatacacc 1500

cccgcttcct catgttatag gtgatggtat agcttagcct ataggtgtgg gttattgacc 1560

attattgacc actcccctat tggtgacgat actttccatt actaatccat aacatggctc 1620

tttgccacaa ctctctttat tggctatatg ccaatacact gtccttcaga gactgacacg 1680

gactctgtat ttttacagga tgggttctca tttattattt acaaattcac atatacaaca 1740

ccaccgtccc cagtgcccgc agtttttatt aaacataacg tgggatctcc acgcgaatct 1800

cgggtacgtg ttccggacat gggttcttct ccggtagcgg cggagcttct acatccgagc 1860

cctgctccca tgcctccagc gactcatggt cgctcggcag ctccttgctc ctaacagtgg 1920

aggccagact taggcacagc acgatgccca ccaccaccag tgtgccgcac aaggccgtgg 1980

cggtagggta tgtgtctgaa aatgagctcg gggagcgggc ttgcaccgct gacgcatttg 2040

aaagacttaa ggcagcggca gaagaagatg caggcagctg agttgttgtg ttctgataag 2100

agtcagaggt aactcccgtt gcggtgctgt taacggtgga gggcagtgta gtctgagcag 2160

tactcgttgc tgccgcgcgc gccaccagac ataatagctg acagactaac agactgttcc 2220

tttccatggg tcttttctgc agtcaccgtc cttgacacga agtttgctcg agccacc 2277

<210> 630
<211> 1698
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 630
cttgctcacc tcgagtacga tagccggcta atcagccata ccacatttgt agaggtttta 60

cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt 120

gttgttgtta acttgtttat tgcagcttat aatggttaca ataaagcaa tagcatcaca 180

aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc caaactcatc 240

aatgtatctt atcatgtctg gtattcggac ggtgacgata tttgaaaata tggcatattg 300

aaaatgtcgc cgatgtgagt ttctgtgtaa ctgatatcgc catttttcca aaagtgattt 360

ttgggcatac gcgatatctg gcgatagcgc ttatatcgtt tacgggggat ggcgatagac 420

gactttggtg acttgggcga ttctgtgtgt cgcaaatatc gcagtttcga tataggtgac 480

agacgatatg aggctatatc gccgatagag gcgacatcaa gctggcacat ggccaatgca 540

tatcgatcta tacattgaat caatattggc cattagccat attattcatt ggttatatag 600

cataaatcaa tattggctat tggccattgc atacgttgta tccatatcat aatatgtaca 660

tttatattgg ctcatgtcca acattaccgc catgttgaca ttgattattg actagttatt 720

aatagtaatc aattacgggg tcattagttc atagcccata tatggagttc cgcgttacat 780

aacttacggt aaatggcccg cctggctgac cgcccaacga cccccgccca ttgacgtcaa 840

taatgacgta tgttcccata gtaacgccaa tagggacttt ccattgacgt caatgggtgg 900

agtatttacg gtaaactgcc cacttggcag tacatcaagt gtatcatatg ccaagtacgc 960

cccctattga cgtcaatgac ggtaaatggc ccgcctggca ttatgcccag tacatgacct 1020

tatgggactt tcctacttgg cagtacatct acgtattagt catcgctatt accatggtga 1080

tgcggttttg gcagtacatc aatgggcgtg gatagcggtt tgactcacgg ggatttccaa 1140

gtctccaccc cattgacgtc aatgggagtt tgttttggca ccaaaatcaa cgggactttc 1200

caaaatgtcg taacaactcc gccccattga cgcaaatggg cggtaggcgt gtacggtggg 1260

aggtctatat aagcagagct cgtttagtga accgtcagat cgcctggaga cgccatccac 1320

gctgttttga cctccataga agataccggg accgatccag cctccgcggc cgggaacggt 1380

gcattggaac gcggattccc cgtgccaaga gtgaccctgg cagaactcgg taagtctgtt 1440

gacatgtatg tgatgtatac taacctgcat gggacgtgga tttacttgtg tatgtcagat 1500

agagtaaaga ttaactcttg catgtgagcg gggcatcgag atagcgataa atgagtcagg 1560

aggacggagc ctctgctaac catgttcatg ccttcttctt tttcctacag ctcctgggca 1620

acgtgctggt tattgtgctg tctcatcatt ttggcaaaga atttcaccgt ccttgacacg 1680

aagtttgctc gagccacc 1698

<210> 631
<211> 2450
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 631
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga gcggggctga cgtcgggagg tggcctccgt 1020

gggaagggac acccggatct tgacacagcc ttggcagcgg agtaaggaag agtagggata 1080

gattctggcc gccctcttgg ccagcttctc gccgccccac cctccgctag ggccaagagt 1140

aattcataca aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat 1200

tctcacagac ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgctcaggg 1260

ctgagcgcgg ggagagcaga gcacacaagc tcatagaccc tggtcgtggg ggggaggacc 1320

ggggagctgg cgcggggcaa actgggaaag cggtgtcgtg tgctggctcc gccctcttcc 1380

cgagggtggg ggagaacggt atataagtgc ggcagtcgcc ttggacgttc tttttcgcaa 1440

cgggtttgcc gtcagaacgc aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg 1500

gaggtcctgc tccgagcggg ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat 1560

tcccgcttcg agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt 1620

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta 1680

ctccggccgc actctggtct ttttttttt gttgttgttg ccctgctgcc ttcgattgcc 1740

gttcagcaat aggggctaac aaagggaggg tgcggggctt gctcgcccgg agcccggaga 1800

ggtcatggtt ggggaggaat ggagggacag gagtggcggc tggggcccgc ccgccttcgg 1860

agcacatgtc cgacgccacc tggatggggc gaggcctggg gtttttcccg aagcaaccag 1920

gctggggtta gcgtgccgag gccatgtggc cccagcaccc ggcacgatct ggcttggcgg 1980

cgccgcgttg ccctgcctcc ctaactaggg tgaggccatc ccgtccggca ccagttgcgt 2040

gcgtggaaag atggccgctc ccgggccctg ttgcaaggag ctcaaaatgg aggacgcggc 2100

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctg gtccctcacc 2160

ggctgctgct tcctgtgacc ccgtggtcct atcggccgca atagtcacct cgggcttttg 2220

agcacggcta gtcgcggcgg ggggagggga tgtaatggcg ttggagtttg ttcacatttg 2280

gtgggtggag actagtcagg ccagcctggc gctggaagtc atttttggaa tttgtcccct 2340

tgagttttga gcggagctaa ttctcgggct tcttagcggt tcaaaggtat cttttaaacc 2400

ctttttagg tgttgtgaaa accaccgcta attcaaagca agccgccacc 2450

<210> 632
<211> 2407
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 632
ccgcctagga catattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 60

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 120

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 180

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttaa 240

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 300

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaagc atatactgag 360

attgagatta acttcctgtg aaacccagtg tcttagacaa ctgtggcttg agcaccacct 420

gttggtattc attacaaact tgctcactac aataaatgaa ttttaagctt taagatgaag 480

tggcatttct tttaacagtt actatgttgg aattggttac aaattttgga gtggactatt 540

gtatatatat atcagttact gttatggatc ccacgtcact attgtatact ctatattata 600

ctctatgtta tactctgtaa tcctactcaa taaacgtgtc acgcctgtga aaccgtacta 660

agtctcccgt gtcttgttat caccatcagg tgacatcctc gcccaggctg tcaatcatgc 720

cggtatcgat tccagtagca ccggccccac gctgacaacc cactcttgca gcgttagcag 780

cgcccctctt aacaagccga cccccaccag cgtcgcggtt actaacactc ctctccccgg 840

ggcatccgct actcccgagc tcgaattcgt ttatcggcca ccgaggccaa gatctggccg 900

ccatatactg agtcattagg gactttccaa tgggttttgc ccagtacata aggtcaatag 960

gggtgaatca acaggaaagt cccattggag ccaagtacac tgagtcaata gggactttcc 1020

attgggtttt gcccagtaca aaaggtcaat agggggtgag tcaatgggtt tttcccatta 1080

ttggcacgta cataaggtca ataggggtga gtcattgggt ttttccagcc aatttataaa 1140

acgccatgta ctttcccacc attgacgtca atgggctatt gaaactaatg caacgtgacc 1200

tttaaacggt actttcccat agctgattaa tgggaaagta ccgttctcga gccaatacac 1260

gtcaatggga agtgaaaggg cagccaaaac gtaacaccgc cccggttttc ccctggaaat 1320

tccatattgg cacgcattct attggctgag ctgcgttcta cgtgggtata agaggcgcga 1380

ccagcgtcgg tagggaccgg tttgccgcca gaacacaggt gaggggcggg tgtggcttcc 1440

gcgggccgcc gagctggagg tcctgctccg agcgggccgg gccccgctgt cgtcggcggg 1500

gattagctgc gagcattccc gcttcgagtt gcgggcggcg cgggaggcag agtgcgaggc 1560

ctagcggcaa ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcg 1620

ccgccgccgc gtgctactcc ggccgcactc tggtcttttt ttttttgtt gttgttgccc 1680

tgctgccttc gattgccgtt cagcaatagg ggctaacaaa gggagggtgc ggggcttgct 1740

cgcccggagc ccggagaggt catggttggg gaggaatgga gggacaggag tggcggctgg 1800

ggcccgcccg ccttcggagc acatgtccga cgccacctgg atggggcgag gcctggggtt 1860

tttcccgaag caaccaggct ggggttagcg tgccgaggcc atgtggcccc agcacccggc 1920

acgatctggc ttggcggcgc cgcgttgccc tgcctcccta actagggtga ggccatcccg 1980

tccggcacca gttgcgtgcg tggaaagatg gccgctcccg ggccctgttg caaggagctc 2040

aaaatggagg acgcggcagc ccggtggagc gggcgggtga gtcacccaca caaaggaaga 2100

gggcctggtc cctcaccggc tgctgcttcc tgtgaccccg tggtcctatc ggccgcaata 2160

gtcacctcgg gcttttgagc acggctagtc gcggcggggg gaggggatgt aatggcgttg 2220

gagtttgttc acatttggtg ggtggagact agtcaggcca gcctggcgct ggaagtcatt 2280

tttggaattt gtccccttga gttttgagcg gagctaattc tcgggcttct tagcggttca 2340

aaggtatctt ttaaaccctt ttttaggtgt tgtgaaaacc accgctaatt caaagcaagc 2400

cgccacc 2407

<210> 633
<211> 1820
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 633
ccgcctagga ctgtatactc tatattatac tctatgttat actctgtaat cctactcaat 60

aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg tcttcttatc accatcaggt 120

gacatcctcg cccaggctgt caatcatgcc ggtatcgatt ccagtagcac cggccccacg 180

ctgacaaccc actcttgcag cgttagcagc gcccctctta acaagccgac ccccaccagc 240

gtcgcggtta ctaacactcc tctccccggg gcatccgcta ctcccgagct cgaattcgtt 300

tatcggccac cgaggccaag atctggccgc catatactga gtcattaggg actttccaat 360

gggttttgcc cagtacataa ggtcaatagg ggtgaatcaa caggaaagtc ccattggagc 420

caagtacact gagtcaatag ggactttcca ttgggttttg cccagtacaa aaggtcaata 480

gggggtgagt caatgggttt ttcccattat tggcacgtac ataaggtcaa taggggtgag 540

tcattgggtt tttccagcca atttataaaa cgccatgtac tttcccacca ttgacgtcaa 600

tgggctattg aaactaatgc aacgtgacct ttaaacggta ctttcccata gctgattaat 660

gggaaagtac cgttctcgag ccaatacacg tcaatgggaa gtgaaagggc agccaaaacg 720

taacaccgcc ccggttttcc cctggaaatt ccatattggc acgcattcta ttggctgagc 780

tgcgttctac gtgggtataa gaggcgcgac cagcgtcggt agggaccggt ttgccgccag 840

aacacaggtg agtggcgggt gtggcttccg cgggccccgg agctggagcc ctgctctgag 900

cgggccgggc tgatatgcga gtgtcgtccg cagggtttag ctgtgagcat tcccacttcg 960

agtggcgggc ggtgcggggg tgagagtgcg aggcctagcg gcaaccccgt agcctcgcct 1020

cgtgtccggc ttgaggccta gcgtggtgtc cgccgccgcg tgccactccg gccgcactat 1080

gcgtttttg tccttgctgc cctcgattgc cttccagcag catgggctaa caaagggagg 1140

gtgtggggct cactcttaag gagcccatga agcttacgtt ggataggaat ggaagggcag 1200

gaggggcgac tggggcccgc ccgccttcgg agcacatgtc cgacgccacc tggatggggc 1260

gaggcctgtg gctttccgaa gcaatcgggc gtgagtttag cctacctggg ccatgtggcc 1320

ctagcactgg gcacggtctg gcctggcggt gccgcgttcc cttgcctccc aacaagggtg 1380

aggccgtccc gcccggcacc agttgcttgc gcggaaagat ggccgctccc ggggccctgt 1440

tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt gagtcaccca 1500

cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc cgtggtctat 1560

cggccgcata gtcacctcgg gcttctcttg agcaccgctc gtcgcggcgg ggggagggga 1620

tctaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg ccagcctggc 1680

gctggaagtc attcttggaa tttgcccctt tgagtttgga gcgaggctaa ttctcaagcc 1740

tcttagcggt tcaaaggtat tttctaaacc cgtttccagg tgttgtgaaa accaccgcta 1800

attcaaagca agccgccacc 1820

<210> 634
<211> 2478
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 634
ccgcctagga catattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 60

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 120

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 180

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttaa 240

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 300

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaagc atatactgag 360

attgagatta acttcctgtg aaacccagtg tcttagacaa ctgtggcttg agcaccacct 420

gttggtattc attacaaact tgctcactac aataaatgaa ttttaagctt taagatgaag 480

tggcatttct tttaacagtt actatgttgg aattggttac aaattttgga gtggactatt 540

gtatatatat atcagttact gttatggatc ccacgtcact attgtatact ctatattata 600

ctctatgtta tactctgtaa tcctactcaa taaacgtgtc acgcctgtga aaccgtacta 660

agtctcccgt gtcttgttat caccatcagg tgacatcctc gcccaggctg tcaatcatgc 720

cggtatcgat tccagtagca ccggccccac gctgacaacc cactcttgca gcgttagcag 780

cgcccctctt aacaagccga cccccaccag cgtcgcggtt actaacactc ctctccccgg 840

ggcatccgct actcccgagc tcgaattcgt ttatcggcca ccgaggccaa gatctggccg 900

ccaacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc cattgacgtc 960

aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt 1020

ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtcc 1080

gcccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc agtacatgac 1140

cttacgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta ttaccaagtc 1200

attgggtttt tccagccaat ttataaaacg ccatgtactt tcccaccatt gacgtcaatg 1260

ggctattgaa actaatgcaa cgtgaccttt aaacggtact ttcccatagc tgattaatgg 1320

gaaagtaccg ttctcgagcc aatacacgtc aatgggaagt gaaagggcag ccaaaacgta 1380

acaccgcccc ggttttcccc tggaaattcc atattggcac gcattctatt ggctgagctg 1440

cgttctacgt gggtataaga ggcgcgacca gcgtcggtag ggaccggttt gccgccagaa 1500

cacaggtgag tggcgggtgt ggcttccgcg ggccccggag ctggagccct gctctgagcg 1560

ggccgggctg atatgcgagt gtcgtccgca gggtttagct gtgagcattc ccacttcgag 1620

tggcgggcgg tgcgggggtg agagtgcgag gcctagcggc aaccccgtag cctcgcctcg 1680

tgtccggctt gaggcctagc gtggtgtccg ccgccgcgtg ccactccggc cgcactatgc 1740

gttttttgtc cttgctgccc tcgattgcct tccagcagca tgggctaaca aagggagggt 1800

gtggggctca ctcttaagga gcccatgaag cttacgttgg ataggaatgg aagggcagga 1860

ggggcgactg gggcccgccc gccttcggag cacatgtccg acgccacctg gatggggcga 1920

ggcctgtggc tttccgaagc aatcgggcgt gagtttagcc tacctgggcc atgtggccct 1980

agcactgggc acggtctggc ctggcggtgc cgcgttccct tgcctcccaa caagggtgag 2040

gccgtcccgc ccggcaccag ttgcttgcgc ggaaagatgg ccgctcccgg ggccctgttg 2100

caaggagctc aaaatggagg acgcggcagc ccggtggagc gggcgggtga gtcacccaca 2160

caaaggaaga gggccttgcc cctcgccggc cgctgcttcc tgtgaccccg tggtctatcg 2220

gccgcatagt cacctcgggc ttctcttgag caccgctcgt cgcggcgggg ggaggggatc 2280

taatggcgtt ggagtttgtt cacatttggt gggtggagac tagtcaggcc agcctggcgc 2340

tggaagtcat tcttggaatt tgccccttg agtttggagc gaggctaatt ctcaagcctc 2400

ttagcggttc aaaggtattt tctaaacccg tttccaggtg ttgtgaaaac caccgctaat 2460

tcaaagcaag ccgccacc 2478

<210> 635
<211> 2394
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 635
taatcgagta cgatagccgg ctaatcagcc ataccacatt tgtagaggtt ttacttgctt 60

taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca attgttgttg 120

ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc acaaatttca 180

caaataaagc atttttttca ctgcattcta gttgtggttt gtccaaactc atcaatgtat 240

cttatcatgt ctggaattcg gacggtgact gcagtgaata ataaaatgtg tgtttgtccg 300

aaatacgcgt tttgagattt ctgtcgccga ctaaattcat gtcgcgcgat agtggtgttt 360

atcgccgata gagatggcga tattggaaaa atcgatattt gaaaatatgg catattgaaa 420

atgtcgccga tgtgagtttc tgtgtaactg atatcgccat ttttccaaaa gtgatttttg 480

ggcatacgcg atatctggcg atagcgctta tatcgtttac gggggatggc gatagacgac 540

tttggtgact tgggcgattc tgtgtgtcgc aaatatcgca gtttcgatat aggtgacaga 600

cgatatgagg ctatatcgcc gatagaggcg acatcaagct ggcacatggc caatgcatat 660

cgatctatac attgaatcaa tattggccat tagccatatt attcattggt tatatagcat 720

aaatcaatat tggctattgg ccattgcata cgttgtatcc atatcataat atgtacattt 780

atattggctc atgtccaaca ttaccgccat gttgacattg attattgact agttattaat 840

agtaatcaat tacggggtca ttagttcata gcccatatat ggagttccgc gttacataac 900

ttacggtaaa tggcccgcct ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa 960

tgacgtatgt tcccatagta acgccaatag ggactttcca ttgacgtcaa tgggtggagt 1020

atttacggta aactgcccac ttggcagtac atcaagtgta tcatatgcca agtacgcccc 1080

ctattgacgt caatgacggt aaatggcccg cctggcatta tgcccagtac atgaccttat 1140

gggactttcc tacttggcag tacatctacg tattagtcat cgctattacc atggtgatgc 1200

ggttttggca gtacatcaat gggcgtggat agcggtttga ctcacgggga tttccaagtc 1260

tccaccccat tgacgtcaat gggagtttgt tttggcacca aaatcaacgg gactttccaa 1320

aatgtcgtaa caactccgcc ccattgacgc aaatgggcgg taggcgtgta cggtgggagg 1380

tctatataag cagagctcgt ttagtgaacc gtcagatcgc ctggagaggc catccacgct 1440

gttttgacct ccatagtgga caccgggacc gatccagcct ccgcggccgg gaacggtgca 1500

ttggaacgcg gattccccgt gccaagagtg acgtaagtac cgcctataga gtctataggc 1560

ccacccccttt ggcttcttat gcatgctata ctgtttttgg cttggggtct atacaccccc 1620

gcttcctcat gttataggtg atggtatagc ttagcctata ggtgtgggtt attgaccatt 1680

attgaccact cccctattgg tgacgatact ttccattact aatccataac atggctcttt 1740

gccacaactc tctttattgg ctatatgcca atacactgtc cttcagagac tgacacggac 1800

tctgtatttt tacaggatgg gttctcattt attatttaca aattcacata tacaacacca 1860

ccgtccccag tgcccgcagt ttttattaaa cataacgtgg gatctccacg cgaatctcgg 1920

gtacgtgttc cggacatggg ttcttctccg gtagcggcgg agcttctaca tccgagccct 1980

gctcccatgc ctccagcgac tcatggtcgc tcggcagctc cttgctccta acagtggagg 2040

ccagacttag gcacagcacg atgcccacca ccaccagtgt gccgcacaag gccgtggcgg 2100

tagggtatgt gtctgaaaat gagctcgggg agcgggcttg caccgctgac gcatttgaaa 2160

gacttaaggc agcggcagaa gaagatgcag gcagctgagt tgttgtgttc tgataagagt 2220

cagaggtaac tcccgttgcg gtgctgttaa cggtggaggg cagtgtagtc tgagcagtac 2280

tcgttgctgc cgcgcgcgcc accagacata atagctgaca gactaacaga ctgttccttt 2340

ccatgggtct tttctgcagt caccgtcctt gacacgaagt ttgctcgagc cacc 2394

<210> 636
<211> 2498
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 636
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga gcggggctga cgtcgggagg tggcctccgt 1020

gggaagggac acccggatct tgacacagcc ttggcagcgg agtaaggaag agtagggata 1080

gattctggcc gccctcttgg ccagcttctc gccgccccac cctccgctag ggccaagagt 1140

aattcataca aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat 1200

tctcacagac ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgctcaggg 1260

ctgagcgcgg ggagagcaga gcacacaagc tcatagaccc tggtcgtggg ggggaggacc 1320

ggggagctgg cgcggggcaa actgggaaag cggtgtcgtg tgctggctcc gccctcttcc 1380

cgagggtggg ggagaacggt atataagtgc ggcagtcgcc ttggacgttc tttttcgcaa 1440

cgggtttgcc gtcagaacgc aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg 1500

gaggtcctgc tccgagcggg ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat 1560

tcccgcttcg agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt 1620

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta 1680

ctccggccgc actctggtct ttttttttt gttgttgttg ccctgctgcc ttcgattgcc 1740

gttcagcaat aggggctaac aaagggaggg tgcggggctt gctcgcccgg agcccggaga 1800

ggtcatggtt ggggaggaat ggagggacag gagtggcggc tggggcccgc ccgccttcgg 1860

agcacatgtc cgacgccacc tggatggggc gaggcctggg gtttttcccg aagcaaccag 1920

gctggggtta gcgtgccgag gccatgtggc cccagcaccc ggcacgatct ggcttggcgg 1980

cgccgcgttg ccctgcctcc ctaactaggg tgaggccatc ccgtccggca ccagttgcgt 2040

gcgtggaaag atggccgctc ccgggccctg ttgcaaggag ctcaaaatgg aggacgcggc 2100

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctg gtccctcacc 2160

ggctgctgct tcctgtgacc ccgtggtcct atcggccgca atagtcacct cgggcttttg 2220

agcacggcta gtcgcggcgg ggggagggga tgtaatggcg ttggagtttg ttcacatttg 2280

gtgggtggag actagtcagg ccagcctggc gctggaagtc atttttggaa tttgtcccct 2340

tgagttttga gcggagctaa ttctcgggct tcttagcggt tcaaaggtat cttttaaacc 2400

ctttttagg tgttgtgaaa accaccgcta attcaaagca aagcttgctt gttcttttg 2460

cagaagctca gaataaacgc tcaactttgg ccgccacc 2498

<210> 637
<211> 1906
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 637
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga cttacggtaa atggcccgcc tggctgaccg 1020

cccaacgacc cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata 1080

gggactttcc attgacgtca atgggtggag tatttacggt aaactgccca cttggcagta 1140

catcaagtgt atcatatgcc aagtccgccc cctattgacg tcaatgacgg taaatggccc 1200

gcctggcatt atgcccagta catgacctta cgggactttc ctacttggca gtacatctac 1260

gtattagtca tcgctattac catgctgatg cggttttggc agtacaccaa tgggcgtgga 1320

tagcggtttg actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg 1380

ttttggcacc aaaatcaacg ggactttcca aaatgtcgta ataaccccgc cccgttgacg 1440

caaatgggcg gtaggcgtgt acggtgggag gtctatataa gcagagctcg tttagtgaac 1500

cgtcagatcg cctggagacg ccatccacgc tgttttgacc tccatagaag ataccgggac 1560

cgatccagcc tccgcggccg ggaacggtgc attggaacgc ggattccccg tgccaagagt 1620

gaccctggca gaactcggta agtctgttga catgtatgtg atgtatacta acctgcatgg 1680

gacgtggatt tacttgtgta tgtcagatag agtaaagatt aactcttgca tgtgagcggg 1740

gcatcgagat agcgataaat gagtcaggag gacggagcct ctgctaacca tgttcatgcc 1800

ttcttctttt tcctacagct cctgggcaac gtgctggtta ttgtgctgtc tcatcatttt 1860

ggcaaagaat ttcaccgtcc ttgacacgaa gtttgctcga gccacc 1906

<210> 638
<211> 1996
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 638
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc ggccgccatc tctggagacg 300

acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 360

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 420

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtacgcc 480

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 540

atgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaacccgcc 600

ccgaccggag ctgagagtaa ttcatacaaa aggactcgcc cctgccttgg ggaatcccag 660

ggaccgtcgt taaactccca ctaacgtaga acccagagat cgctgcgttc ccgccccctc 720

acccgcccgc tctcgtcatc actgaggtgg agaatagcat gcgtgaggct ccggtgcccg 780

tcagtgggca gagcgcacat cgcccacagt ccccgagaag ttgggggggag gggtcggcaa 840

ttgaacgggt gcctagagaa ggtggcgcgg ggtaaactgg gaaagtgatg tcgtgtactg 900

gctccgcctt tttcccgagg gtgggggaga accgtatata agtgcagtag tcgccgtgaa 960

cgttcttttt cgcaacgggt ttgccgccag aacacaggta agtgccgtgt gtggttcccg 1020

cgggcctggc ctctttacgg gttatggccc ttgcgtgcct tgaattactt ccacctggct 1080

ccagtacgtg attcttgatc ccgagctgga gccaggggcg ggccttgcgc tttaggagcc 1140

ccttcgcctc gtgcttgagt tgaggcctgg cctgggcgct ggggccgccg cgtgcgaatc 1200

tggtggcacc ttcgcgcctg tctcgctgct ttcgataagt ctctagccat ttaaaatttt 1260

tgatgacgtg ctgcgacgct ttttttctgg caagatagtc ttgtaaatgc gggccaggat 1320

ctgcacactg gtatttcggt ttttgggccc gcggccggcg acggggcccg tgcgtcccag 1380

cgcacatgtt cggcgaggcg gggcctgcga gcgcggccac cgagaatcgg acgggggtag 1440

tctcaagctg gccggcctgc tctggtgcct ggcctcgcgc cgccgtgtat cgccccgccc 1500

tgggcggcaa ggctggcccg gtcggcacca gttgcgtgag cggaaagatg gccgcttccc 1560

ggccctgctc caggggggctc aaaatggagg acgcggcgct cgggagagcg ggcgggtgag 1620

tcacccacac aaaggaaaag ggcctttccg tcctcagccg tcgcttcatg tgactccacg 1680

gagtaccggg cgccgtccag gcacctcgat tagttctgga gcttttggag tacgtcgtct 1740

ttaggttggg gggaggggtt ttatgcgatg gagtttcccc acactgagtg ggtggagact 1800

gaagttaggc cagcttggca cttgatgtaa ttctccttgg aatttggcct ttttgagttt 1860

ggatcttggt tcattctcaa gcctcagaca gtggttcaaa gtttttttct tccatttcag 1920

gtgtcctgaa cacgtctcaa gcttgcttgt tctttttgca gaagctcaga ataaacgctc 1980

aactttggcc gccacc 1996

<210> 639
<211> 1411
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 639
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc ggccgccatc tctggagacg 300

acttacggta aatggcccgc ctggctgacc gcccaacgac ccccgcccat tgacgtcaat 360

aatgacgtat gttcccatag taacgccaat agggactttc cattgacgtc aatgggtgga 420

gtatttacgg taaactgccc acttggcagt acatcaagtg tatcatatgc caagtacgcc 480

ccctattgac gtcaatgacg gtaaatggcc cgcctggcat tatgcccagt acatgacctt 540

atgggacttt cctacttggc agtacatcta cgtattagtc atcgctatta ccaatgacgt 600

cgaggagaag ttccccaact ttcccgcctc tcagcctttg aaagaaagaa aggggagggg 660

gcaggccgcg tgcagccgcg agcggtgctg ggctccggct ccaattcccc atctcagtcg 720

ttcccaaagt cctcctgttt catccaagcg tgtaagggtc cccgtccttg actccctagt 780

gtcctgctgc ccacagtcca gtcctgggaa ccagcaccga tcacctccca tcgggccaat 840

ctcagtccct tccccctac gtcggggccc acacgctcgg tgcgtgccca gttgaaccag 900

gcggctgcgg aaaaaaaaaa gcggggagaa agtagggccc ggctactagc ggttttacgg 960

gcgcacgtag ctcaggcctc aagaccttgg gctgggactg gctgagcctg gcgggaggcg 1020

gggtccgagt caccgcctgc cgccgcgccc ccggtttcta taaattgagc ccgcagcctc 1080

ccgcttcgct ctctgctcct cctgttcgac agtcagccgc atcttctttt gcgtcgccag 1140

cgtctcaggg gccctggcag aactcggtaa gtctgttgac atgtatgtga tgtatactaa 1200

cctgcatggg acgtggattt acttgtgtat gtcagataga gtaaagatta actcttgcat 1260

gtgagcgggg catcgagata gcgataaatg agtcaggagg acggatactt atatgtgttg 1320

ttatcctcct ctacagtcaa acagattaag gggtagcttg cttgttcttt ttgcagaagc 1380

tcagaataaa cgctcaactt tggccgccac c 1411

<210> 640
<211> 917
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 640
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc ggccgccata tactgagtca 300

ttagggactt tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg 360

aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg gttttgccca 420

gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa 480

ggtcaatagg ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc 540

ccaccattga cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt 600

cccatagctg attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga 660

aagggcagcc aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc 720

attctattgg ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaccg 780

tcgcagtctt gggtctgacc accgtagaac gcagagctcc tcgctgcagt atcctgccca 840

agaaagagcg acccgtctca agcttgcttg ttctttttgc agaagctcag aataaacgct 900

caactttggc cgccacc 917

<210> 641
<211> 1797
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 641
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc ggccgccaag cggggctgac 300

gtcgggaggt ggcctccgtg ggaagggaca cccggatctt gacacagcct tggcagcgga 360

gtaaggaaga gtagggatag attctggccg ccctcttggc cagcttctcg ccgccccacc 420

ctccgctagg gccaagagta attcatacaa aaggagggat cgccttcgca aggggagagc 480

ccagggaccg tccctaaatt ctcacagacc caaatccctg tagccgcccc acgacagcgc 540

gaggagcatg cgctcagggc tgagcgcggg gagagcagag cacacaagct catagaccct 600

ggtcgtgggg gggaggaccg gggagctggc gcggggcaaa ctgggaaagc ggtgtcgtgt 660

gctggctccg ccctcttccc gagggtgggg gagaacggta tataagtgcg gcagtcgcct 720

tggacgttct ttttcgcaac gggtttgccg tcagaacgca ggtgaggggc gggtgtggct 780

tccgcgggcc gccgagctgg aggtcctgct ccgagcgggc cgggccccgc tgtcgtcggc 840

ggggattagc tgcgagcatt cccgcttcga gttgcgggcg gcgcgggagg cagagtgcga 900

ggcctagcgg caaccccgta gcctcgcctc gtgtccggct tgaggcctag cgtggtgtcc 960

gcgccgccgc cgcgtgctac tccggccgca ctctggtctt ttttttttg ttgttgttgc 1020

cctgctgcct tcgattgccg ttcagcaata ggggctaaca aagggagggt gcggggcttg 1080

ctcgcccgga gcccggagag gtcatggttg gggaggaatg gagggacagg agtggcggct 1140

ggggcccgcc cgccttcgga gcacatgtcc gacgccacct ggatggggcg aggcctgggg 1200

tttttcccga agcaaccagg ctggggttag cgtgccgagg ccatgtggcc ccagcacccg 1260

gcacgatctg gcttggcggc gccgcgttgc cctgcctccc taactagggt gaggccatcc 1320

cgtccggcac cagttgcgtg cgtggaaaga tggccgctcc cgggccctgt tgcaaggagc 1380

tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa 1440

gagggcctgg tccctcaccg gctgctgctt cctgtgaccc cgtggtccta tcggccgcaa 1500

tagtcacctc gggcttttga gcacggctag tcgcggcggg gggaggggat gtaatggcgt 1560

tggagtttgt tcacatttgg tgggtggaga ctagtcaggc cagcctggcg ctggaagtca 1620

tttttggaat ttgtcccctt gagttttgag cggagctaat tctcgggctt cttagcggtt 1680

caaaggtatc ttttaaaccc ttttttaggt gttgtgaaaa ccaccgctaa ttcaaagcaa 1740

agcttgcttg ttctttttgc agaagctcag aataaacgct caactttggc cgccacc 1797

<210> 642
<211> 2359
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 642
gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc gctatgacgg 60

caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa acgcggggtt 120

cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg ccaatacgcc 180

cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc agggctcgca 240

gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta gggttcatag 300

ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg gcgcgccaaa 360

atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc cccccaaagc 420

ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc gcccggggct 480

ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg gacagcccgg 540

gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc tctttgagcc 600

tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga tttagaatga 660

cagacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc cattgacgtc 720

aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt 780

ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtac 840

gccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc agtacatgac 900

cttatgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta ttaccaaccc 960

gccccgaccg gagctgagag taattcatac aaaaggactc gcccctgcct tggggaatcc 1020

cagggaccgt cgttaaactc ccactaacgt agaacccaga gatcgctgcg ttcccgcccc 1080

ctcacccgcc cgctctcgtc atcactgagg tggagaatag catgcgtgag gctccggtgc 1140

ccgtcagtgg gcagagcgca catcgcccac agtccccgag aagttggggg gaggggtcgg 1200

caattgaacg ggtgcctaga gaaggtggcg cggggtaaac tgggaaagtg atgtcgtgta 1260

ctggctccgc ctttttcccg agggtggggg agaaccgtat ataagtgcag tagtcgccgt 1320

gaacgttctt tttcgcaacg ggtttgccgc cagaacacag gtaagtgccg tgtgtggttc 1380

ccgcgggcct ggcctcttta cgggttatgg cccttgcgtg ccttgaatta cttccacctg 1440

gctccagtac gtgattcttg atcccgagct ggagccaggg gcgggccttg cgctttagga 1500

gccccttcgc ctcgtgcttg agttgaggcc tggcctgggc gctggggccg ccgcgtgcga 1560

atctggtggc accttcgcgc ctgtctcgct gctttcgata agtctctagc catttaaaat 1620

ttttgatgac gtgctgcgac gctttttttc tggcaagata gtcttgtaaa tgcgggccag 1680

gatctgcaca ctggtatttc ggtttttggg cccgcggccg gcgacggggc ccgtgcgtcc 1740

cagcgcacat gttcggcgag gcggggcctg cgagcgcggc caccgagaat cggacggggg 1800

tagtctcaag ctggccggcc tgctctggtg cctggcctcg cgccgccgtg tatcgccccg 1860

ccctgggcgg caaggctggc ccggtcggca ccagttgcgt gagcggaaag atggccgctt 1920

cccggccctg ctccaggggg ctcaaaatgg aggacgcggc gctcgggaga gcgggcgggt 1980

gagtcaccca cacaaaggaa aagggccttt ccgtcctcag ccgtcgcttc atgtgactcc 2040

acggagtacc gggcgccgtc caggcacctc gattagttct ggagcttttg gagtacgtcg 2100

tctttaggtt gggggggaggg gttttatgcg atggagtttc cccacactga gtgggtggag 2160

actgaagtta ggccagcttg gcacttgatg taattctcct tggaatttgg ccttttgag 2220

tttggatctt ggttcattct caagcctcag acagtggttc aaagtttttt tcttccattt 2280

caggtgtcct gaacacgtct caagcttgct tgttcttttt gcagaagctc agaataaacg 2340

ctcaactttg gccgccacc 2359

<210> 643
<211> 1774
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 643
gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc gctatgacgg 60

caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa acgcggggtt 120

cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg ccaatacgcc 180

cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc agggctcgca 240

gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta gggttcatag 300

ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg gcgcgccaaa 360

atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc cccccaaagc 420

ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc gcccggggct 480

ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg gacagcccgg 540

gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc tctttgagcc 600

tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga tttagaatga 660

cagacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc cattgacgtc 720

aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac gtcaatgggt 780

ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata tgccaagtac 840

gccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc agtacatgac 900

cttatgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta ttaccaatga 960

cgtcgaggag aagttcccca actttcccgc ctctcagcct ttgaaagaaa gaaaggggag 1020

ggggcaggcc gcgtgcagcc gcgagcggtg ctgggctccg gctccaattc cccatctcag 1080

tcgttcccaa agtcctcctg tttcatccaa gcgtgtaagg gtccccgtcc ttgactccct 1140

agtgtcctgc tgcccacagt ccagtcctgg gaaccagcac cgatcacctc ccatcgggcc 1200

aatctcagtc ccttcccccc tacgtcgggg cccacacgct cggtgcgtgc ccagttgaac 1260

caggcggctg cggaaaaaaa aaagcgggga gaaagtaggg cccggctact agcggtttta 1320

cgggcgcacg tagctcaggc ctcaagacct tgggctggga ctggctgagc ctggcgggag 1380

gcggggtccg agtcaccgcc tgccgccgcg cccccggttt ctataaattg agcccgcagc 1440

ctcccgcttc gctctctgct cctcctgttc gacagtcagc cgcatcttct tttgcgtcgc 1500

cagcgtctca ggggccctgg cagaactcgg taagtctgtt gacatgtatg tgatgtatac 1560

taacctgcat gggacgtgga tttacttgtg tatgtcagat agagtaaaga ttaactcttg 1620

catgtgagcg gggcatcgag atagcgataa atgagtcagg aggacggata cttatatgtg 1680

ttgttatcct cctctacagt caaacagatt aaggggtagc ttgcttgttc tttttgcaga 1740

agctcagaat aaacgctcaa ctttggccgc cacc 1774

<210> 644
<211> 1300
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 644
gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc gctatgacgg 60

caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa acgcggggtt 120

cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg ccaatacgcc 180

cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc agggctcgca 240

gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta gggttcatag 300

ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg gcgcgccaaa 360

atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc cccccaaagc 420

ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc gcccggggct 480

ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg gacagcccgg 540

gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc tctttgagcc 600

tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga tttagaatga 660

cagggccgcc atatactgag tcattaggga ctttccaatg ggttttgccc agtacataag 720

gtcaataggg gtgaatcaac aggaaagtcc cattggagcc aagtacactg agtcaatagg 780

gactttccat tgggttttgc ccagtacaaa aggtcaatag ggggtgagtc aatgggtttt 840

tcccattatt ggcacgtaca taaggtcaat aggggtgagt cattgggttt ttccagccaa 900

tttataaaac gccatgtact ttcccaccat tgacgtcaat gggctattga aactaatgca 960

acgtgacctt taaacggtac tttcccatag ctgattaatg ggaaagtacc gttctcgagc 1020

caatacacgt caatgggaag tgaaagggca gccaaaacgt aacaccgccc cggttttccc 1080

ctggaaattc catattggca cgcattctat tggctgagct gcgttctacg tgggtataag 1140

aggcgcgacc agcgtcggta ccgtcgcagt cttgggtctg accaccgtag aacgcagagc 1200

tcctcgctgc agtatcctgc ccaagaaaga gcgacccgtc tcaagcttgc ttgttctttt 1260

tgcagaagct cagaataaac gctcaacttt ggccgccacc 1300

<210> 645
<211> 2172
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 645
gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc gctatgacgg 60

caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa acgcggggtt 120

cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg ccaatacgcc 180

cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc agggctcgca 240

gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta gggttcatag 300

ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg gcgcgccaaa 360

atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc cccccaaagc 420

ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc gcccggggct 480

ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg gacagcccgg 540

gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc tctttgagcc 600

tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga tttagaatga 660

cagagcgggg ctgacgtcgg gaggtggcct ccgtgggaag ggacacccgg atcttgacac 720

agccttggca gcggagtaag gaagagtagg gatagattct ggccgccctc ttggccagct 780

tctcgccgcc ccaccctccg ctagggccaa gagtaattca tacaaaagga gggatcgcct 840

tcgcaagggg agagcccagg gaccgtccct aaattctcac agacccaaat ccctgtagcc 900

gccccacgac agcgcgagga gcatgcgctc agggctgagc gcggggagag cagagcacac 960

aagctcatag accctggtcg tgggggggag gaccggggag ctggcgcggg gcaaactggg 1020

aaagcggtgt cgtgtgctgg ctccgccctc ttcccgaggg tgggggagaa cggtatataa 1080

gtgcggcagt cgccttggac gttctttttc gcaacgggtt tgccgtcaga acgcaggtga 1140

ggggcgggtg tggcttccgc gggccgccga gctggaggtc ctgctccgag cgggccgggc 1200

cccgctgtcg tcggcgggga ttagctgcga gcattcccgc ttcgagttgc gggcggcgcg 1260

ggaggcagag tgcgaggcct agcggcaacc ccgtagcctc gcctcgtgtc cggcttgagg 1320

cctagcgtgg tgtccgcgcc gccgccgcgt gctactccgg ccgcactctg gtctttttt 1380

ttttgttgtt gttgccctgc tgccttcgat tgccgttcag caataggggc taacaaaggg 1440

agggtgcggg gcttgctcgc ccggagcccg gagaggtcat ggttggggag gaatggaggg 1500

acaggagtgg cggctggggc ccgcccgcct tcggagcaca tgtccgacgc cacctggatg 1560

gggcgaggcc tggggttttt cccgaagcaa ccaggctggg gttagcgtgc cgaggccatg 1620

tggccccagc acccggcacg atctggcttg gcggcgccgc gttgccctgc ctccctaact 1680

agggtgaggc catcccgtcc ggcaccagtt gcgtgcgtgg aaagatggcc gctcccgggc 1740

cctgttgcaa ggagctcaaa atggaggacg cggcagcccg gtggagcggg cgggtgagtc 1800

acccacacaa aggaagaggg cctggtccct caccggctgc tgcttcctgt gaccccgtgg 1860

tcctatcggc cgcaatagtc acctcgggct tttgagcacg gctagtcgcg gcgggggggag 1920

gggatgtaat ggcgttggag tttgttcaca tttggtgggt ggagactagt caggccagcc 1980

tggcgctgga agtcattttt ggaatttgtc cccttgagtt ttgagcggag ctaattctcg 2040

ggcttcttag cggttcaaag gtatctttta aacccttttt taggtgttgt gaaaaccacc 2100

gctaattcaa agcaaagctt gcttgttctt tttgcagaag ctcagaataa acgctcaact 2160

ttggccgcca cc 2172

<210> 646
<211> 3976
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 646
gggtaatcga gtacgatagc cggctaatca gccataccac atttgtagag gttttacttg 60

ctttaaaaaa cctcccacac ctccccctga acctgaaaca taaaatgaat gcaattgttg 120

ttgttaactt gtttattgca gcttataatg gttacaaata aagcaatagc atcacaaatt 180

tcacaaataa agcatttttt tcactgcatt ctagttgtgg tttgtccaaa ctcatcaatg 240

tatcttatca tgtctggaat tcggacggtg actgggcctt tcgcccgggc taattatggg 300

gtgtcgccct tcgctgaagg ccctccgcgc ctacagctca agccacatcc gaaaggggag 360

ggagccggga gctgcgcgcg gggccgccgg ggggaggggt ggcaccgccc acgccgggcg 420

gccacgaagg gcggggcagc gggcgcgcgc ccggcggggg gaggggccgc gcgccgcgcc 480

cgctgggaat tggggcccta gggggagggc ggaggcgccg acgaccgcgg cacttaccgt 540

tcgcggcgtg gcgcccggtg gtccccaagg ggagggaagg gggaggcggg gcgaggacag 600

tgaccggagt ctcctcagcg gtggcttttc tgcttggcag cctcagcggc tggcgccaaa 660

accggactcc gcccacttcc tcgcccctgc ggtgcgaggg tgtggaatcc tccagacgct 720

gggggagggg gagttgggag cttaaaaact agtacccctt tgggaccact ttcagcagcg 780

aactctcctg tacaccaggg gtcagttcca cagacgcggg ccaggggtgg gtcattgcgg 840

cgtgaacaat aatttgacta gaagttgatt cgggtgtttc cggaaggggc cgagtcaatc 900

cgccgagttg gggcacggaa aacaaaaagg gaaggctact aagatttttc tggcgggggt 960

tatcattggc gtaactgcag ggaccacctc ccgggttgag ggggctggat ctccaggctg 1020

cggattaagc ccctcccgtc ggcgttaatt tcaaactgcg cgaccgtttc tcacctgcct 1080

tgcgccaagg caggggggcgg gaccctattc caagaggtag taactagcag gactctagcc 1140

ttccgcaatt cattgagcgc atttacggaa gtaacgtcgg gtactgtctc tggccgcaag 1200

ggtgggagga gtacgcattt ggcgtaaggt ggggcgtaga gccttcccgc cattggcggc 1260

ggatagggcg tttacgcgac ggcctgacgt agcggatgac gcgttagtgg gggggaaggt 1320

tctagaaaag cggcggcagc ggctctagcg gcagtagcag cagcgccggg tcccgtgcgg 1380

aggtgctcct cgcagagttg tttctcgagc agcggcagtt ctcactacag cgccaggacg 1440

agtccggttc gtgttcgtcc gcggagatcg atctctctca tctcgctcgg ctgcgggaaa 1500

tcgggctgaa gcgactgagt ccgcgatgga ggtaacgggt ttgaaatcaa tgagttattg 1560

aaaagggcat ggcgaggccg ttggcgcctc agtggaagtc ggccagccgc ctccgtggga 1620

gagaggcagg aaatcggacc aattcagtag cagtggggct taaggtttat gaacggggtc 1680

ttgagcggag gcctgagcgt acaaacagct tccccaccct cagcctcccg gcgccatttc 1740

ccttcactgg gggtggggga tggggagctt tcacatggcg gacgctgccc cgctggggtg 1800

aaagtggggc gcggaggcgg gaattcttat tccctttcta aagcacgctg cttcgggggc 1860

cacggcgact cctcggcgtc cgaaatacgc gttttgagat ttctgtcgcc gactaaattc 1920

atgtcgcgcg atagtggtgt ttatcgccga tagagatggc gatattggaa aaatcgatat 1980

ttgaaaatat ggcatattga aaatgtcgcc gatgtgagtt tctgtgtaac tgatatcgcc 2040

atttttccaa aagtgatttt tgggcatacg cgatatctgg cgatagcgct tatatcgttt 2100

acgggggatg gcgatagacg actttggtga cttgggcgat tctgtgtgtc gcaaatatcg 2160

cagtttcgat ataggtgaca gacgatatga ggctatatcg ccgatagagg cgacatcaag 2220

ctggcacatg gccaatgcat atcgatctat acattgaatc aatattggcc attagccata 2280

ttattcattg gttatatagc ataaatcaat attggctatt ggccattgca tacgttgtat 2340

ccatatcata atatgtacat ttatattggc tcatgtccaa cattaccgcc atgttgacat 2400

tgattattga ctagttatta atagtaatca attacggggt cattagttca tagcccatat 2460

atggagttcc gcgttacata acttacggta aatggcccgc ctggctgacc gcccaacgac 2520

ccccgcccat tgacgtcaat aatgacgtat gttcccatag taacgccaat agggactttc 2580

cattgacgtc aatgggtgga gtatttacgg taaactgccc acttggcagt acatcaagtg 2640

tatcatatgc caagtacgcc ccctattgac gtcaatgacg gtaaatggcc cgcctggcat 2700

tatgcccagt acatgacctt atgggacttt cctacttggc agtacatcta cgtattagtc 2760

atcgctatta ccatggtgat gcggttttgg cagtacatca atgggcgtgg atagcggttt 2820

gactcacggg gatttccaag tctccacccc attgacgtca atgggagttt gttttggcac 2880

caaaatcaac gggactttcc aaaatgtcgt aacaactccg ccccattgac gcaaatgggc 2940

ggtaggcgtg tacggtggga ggtctatata agcagagctc gtttagtgaa ccgtcagatc 3000

gcctggagag gccatccacg ctgttttgac ctccatagtg gacaccggga ccgatccagc 3060

ctccgcggcc gggaacggtg cattggaacg cggattcccc gtgccaagag tgacgtaagt 3120

accgcctata gagtctatag gcccaccccc ttggcttctt atgcatgcta tactgttttt 3180

ggcttggggt ctatacaccc ccgcttcctc atgttatagg tgatggtata gcttagccta 3240

taggtgtggg ttattgacca ttattgacca ctcccctatt ggtgacgata ctttccatta 3300

ctaatccata acatggctct ttgccacaac tctctttatt ggctatatgc caatacactg 3360

tccttcagag actgacacgg actctgtatt tttacaggat gggttctcat ttattattta 3420

caaattcaca tatacaacac caccgtcccc agtgcccgca gtttttatta aacataacgt 3480

gggatctcca cgcgaatctc gggtacgtgt tccggacatg ggttcttctc cggtagcggc 3540

ggagcttcta catccgagcc ctgctcccat gcctccagcg actcatggtc gctcggcagc 3600

tccttgctcc taacagtgga ggccagactt aggcacagca cgatgcccac caccaccagt 3660

gtgccgcaca aggccgtggc ggtagggtat gtgtctgaaa atgagctcgg ggagcgggct 3720

tgcaccgctg acgcatttga aagacttaag gcagcggcag aagaagatgc aggcagctga 3780

gttgttgtgt tctgataaga gtcagaggta actcccgttg cggtgctgtt aacggtggag 3840

ggcagtgtag tctgagcagt actcgttgct gccgcgcgcg ccaccagaca taatagctga 3900

cagactaaca gactgttcct ttccatgggt cttttctgca gtcaccgtcc ttgacacgaa 3960

gtttgctcga gccacc 3976

<210> 647
<211> 2562
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 647
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcagctggac 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt atacatcgtt 420

tccatggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatctgt atactctata ttatactcta tgttatactc tgtaatccta 780

ctcaataaac gtgtcacgcc tgtgaaaccg tactaagtct cccgtgtctt cttatcacca 840

tcaggtgaca tcctcgccca ggctgtcaat catgccggta tcgattccag tagcaccggc 900

cccacgctga caacccactc ttgcagcgtt agcagcgccc ctcttaacaa gccgaccccc 960

accagcgtcg cggttactaa cactcctctc cccggggcat ccgctactcc cgagctcgaa 1020

ttcgtttatc ggccaccgag gccaagatct ggccgccata tactgagtca ttagggactt 1080

tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg aaagtcccat 1140

tggagccaag tacactgagt caatagggac tttccattgg gttttgccca gtacaaaagg 1200

tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa ggtcaatagg 1260

ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc ccaccattga 1320

cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt cccatagctg 1380

attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga aagggcagcc 1440

aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc attctattgg 1500

ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaggg accggtttgc 1560

cgccagaaca caggtgaggg gcgggtgtgg cttccgcggg ccgccgagct ggaggtcctg 1620

ctccgagcgg gccgggcccc gctgtcgtcg gcggggatta gctgcgagca ttcccgcttc 1680

gagttgcggg cggcgcggga ggcagagtgc gaggcctagc ggcaaccccg tagcctcgcc 1740

tcgtgtccgg cttgaggcct agcgtggtgt ccgcgccgcc gccgcgtgct actccggccg 1800

cactctggtc ttttttttt ttgttgttgt tgccctgctg ccttcgattg ccgttcagca 1860

ataggggcta acaaagggag ggtgcggggc ttgctcgccc ggagcccgga gaggtcatgg 1920

ttggggagga atggagggac aggagtggcg gctggggccc gcccgccttc ggagcacatg 1980

tccgacgcca cctggatggg gcgaggcctg gggtttttcc cgaagcaacc aggctggggt 2040

tagcgtgccg aggccatgtg gccccagcac ccggcacgat ctggcttggc ggcgccgcgt 2100

tgccctgcct ccctaactag ggtgaggcca tcccgtccgg caccagttgc gtgcgtggaa 2160

agatggccgc tcccgggccc tgttgcaagg agctcaaaat ggaggacgcg gcagcccggt 2220

ggagcgggcg ggtgagtcac ccacacaaag gaagagggcc tggtccctca ccggctgctg 2280

cttcctgtga ccccgtggtc ctatcggccg caatagtcac ctcgggcttt tgagcacggc 2340

tagtcgcggc ggggggaggg gatgtaatgg cgttggagtt tgttcacatt tggtgggtgg 2400

agactagtca ggccagcctg gcgctggaag tcatttttgg aatttgtccc cttgagtttt 2460

gagcggagct aattctcggg cttcttagcg gttcaaaggt atcttttaaa ccctttttta 2520

ggtgttgtga aaaccaccgc taattcaaag caagccgcca cc 2562

<210> 648
<211> 3220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 648
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcagctggac 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt atacatcgtt 420

tccatggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcata ttatccctaa tacttgccac cccactctta atcagtggtg 780

gaagaacggt gtcagaactg tttgtttcaa ttggccattt aagtttagta gtaaaagact 840

ggttaatgat aacaatgcat cgtaaaacct tcagaaggaa aggagaatgt tttgtggacc 900

actttggttt tctttttgc gtgtggcagt tttaagttat tagtttttaa aatcagtact 960

ttttaatgga aacaacttga ccaaaaattt gtcacagaat tttgagatcc attaaaaaag 1020

ttaaatgaga aacctgtgtg ttcctttggt caacaccgag acatttaggt gaaagcatat 1080

actgagattg agattaactt cctgtgaaac ccagtgtctt agacaactgt ggcttgagca 1140

ccacctgttg gtattcatta caaacttgct cactacaata aatgaatttt aagctttaag 1200

atgaagtggc atttctttta acagttacta tgttggaatt ggttacaaat tttggagtgg 1260

actattgtat atatatatca gttactgtta tggatcccac gtcactattg tatactctat 1320

attatactct atgttatact ctgtaatcct actcaataaa cgtgtcacgc ctgtgaaacc 1380

gtactaagtc tcccgtgtct tgttatcacc atcaggtgac atcctcgccc aggctgtcaa 1440

tcatgccggt atcgattcca gtagcaccgg ccccacgctg acaacccact cttgcagcgt 1500

tagcagcgcc cctcttaaca agccgacccc caccagcgtc gcggttacta acactcctct 1560

ccccggggca tccgctactc ccgagctcga attcgtttat cggccaccga ggccaagatc 1620

tggccgccaa cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt 1680

gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca 1740

atgggtggag tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc 1800

aagtccgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta 1860

catgacctta cgggactttc ctacttggca gtacatctac gtattagtca tcgctattac 1920

caagtcattg ggtttttcca gccaatttat aaaacgccat gtactttccc accattgacg 1980

tcaatgggct attgaaacta atgcaacgtg acctttaaac ggtactttcc catagctgat 2040

taatgggaaa gtaccgttct cgagccaata cacgtcaatg ggaagtgaaa gggcagccaa 2100

aacgtaacac cgccccggtt ttcccctgga aattccatat tggcacgcat tctattggct 2160

gagctgcgtt ctacgtgggt ataagaggcg cgaccagcgt cggtagggac cggtttgccg 2220

ccagaacaca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg aggtcctgct 2280

ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt cccgcttcga 2340

gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta gcctcgcctc 2400

gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac tccggccgca 2460

ctctggtctt ttttttttt gttgttgttg ccctgctgcc ttcgattgcc gttcagcaat 2520

aggggctaac aaagggaggg tgcggggctt gctcgcccgg agcccggaga ggtcatggtt 2580

ggggaggaat ggagggacag gagtggcggc tggggcccgc ccgccttcgg agcacatgtc 2640

cgacgccacc tggatggggc gaggcctggg gtttttcccg aagcaaccag gctggggtta 2700

gcgtgccgag gccatgtggc cccagcaccc ggcacgatct ggcttggcgg cgccgcgttg 2760

ccctgcctcc ctaactaggg tgaggccatc ccgtccggca ccagttgcgt gcgtggaaag 2820

atggccgctc ccgggccctg ttgcaaggag ctcaaaatgg aggacgcggc agcccggtgg 2880

agcgggcggg tgagtcaccc acacaaagga agagggcctg gtccctcacc ggctgctgct 2940

tcctgtgacc ccgtggtcct atcggccgca atagtcacct cgggcttttg agcacggcta 3000

gtcgcggcgg ggggagggga tgtaatggcg ttggagtttg ttcacatttg gtgggtggag 3060

actagtcagg ccagcctggc gctggaagtc atttttggaa tttgtcccct tgagttttga 3120

gcggagctaa ttctcgggct tcttagcggt tcaaaggtat cttttaaacc ctttttttagg 3180

tgttgtgaaa accaccgcta attcaaagca agccgccacc 3220

<210> 649
<211> 1469
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 649
ccgcctagga ctgtatactc tatattatac tctatgttat actctgtaat cctactcaat 60

aaacgtgtca cgcctgtgaa accgtactaa gtctcccgtg tcttcttatc accatcaggt 120

gacatcctcg cccaggctgt caatcatgcc ggtatcgatt ccagtagcac cggccccacg 180

ctgacaaccc actcttgcag cgttagcagc gcccctctta acaagccgac ccccaccagc 240

gtcgcggtta ctaacactcc tctccccggg gcatccgcta ctcccgagct cgaattcgtt 300

tatcggccac cgaggccaag atctggccgc caattgatta ttgactagtt attaatagta 360

atcaattacg gggtcattag ttcatagccc atatatggag ttccgcgtta cataacttac 420

ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc ccattgacgt caataatgac 480

gtatgttccc atagtaacgc caatagggac tttccattga cgtcaatggg tggagtattt 540

acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagtc cgcccccctat 600

tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc cagtacatga ccttacggga 660

ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt 720

ttggcagtac accaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca 780

ccccattgac gtcaatggga gtttgttttg gcaccaaaat caacgggact ttccaaaatg 840

tcgtaataac cccgccccgt tgacgcaaat gggcggtagg cgtgtacggt gggaggtcta 900

tataagcaga gctcgtttag tgaaccgtca gatcctcact ctcttccgca tcgctgtctg 960

cgagggccag ctgttgggct cgcggttgag gacaaactct tcgcggtctt tccagtactc 1020

ttggatcgga aacccgtcgg cctccgaacg gtactccgcc accgagggac ctgagcgagt 1080

ccgcatcgac cggatcggaa aacctctcga gaaaggcgtc taaccagtca cagtcgcaag 1140

gtaggctgag caccgtggcg ggcggcagcg ggtggcggtc ggggttgttt ctggcggagg 1200

tgctgctgat gatgtaatta aagtaggcgg tcttgagacg gcggatggtc gaggtgaggt 1260

gtggcaggct tgagatccag ctgttggggt gagtactccc tctcaaaagc gggcattact 1320

tctgcgctaa gattgtcagt ttccaaaaac gaggaggatt tgatattcac ctggcccgat 1380

ctggccatac acttgagtga caatgacatc cactttgcct ttctctccac aggtgtccac 1440

tcccaggtcc aagtttaaac gccgccacc 1469

<210> 650
<211> 1824
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 650
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaagg acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag atttttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatctat tcggacggtg acgatatttg aaaatatggc 420

atattgaaaa tgtcgccgat gtgagtttct gtgtaactga tatcgccatt tttccaaaag 480

tgatttttgg gcatacgcga tatctggcga tagcgcttat atcgtttacg ggggatggcg 540

atagacgact ttggtgactt gggcgattct gtgtgtcgca aatatcgcag tttcgatata 600

ggtgacagac gatatgaggc tatatcgccg atagaggcga catcaagctg gcacatggcc 660

aatgcatatc gatctataca ttgaatcaat attggccatt agccatatta ttcattggtt 720

atatagcata aatcaatatt ggctattggc cattgcatac gttgtatcca tatcataata 780

tgtacattta tattggctca tgtccaacat taccgccatg ttgacattga ttattgacta 840

gttattaata gtaatcaatt acggggtcat tagttcatag cccatatatg gagttccgcg 900

ttacataact tacggtaaat ggcccgcctg gctgaccgcc caacgacccc cgcccattga 960

cgtcaataat gacgtatgtt cccatagtaa cgccaatagg gactttccat tgacgtcaat 1020

gggtggagta tttacggtaa actgcccact tggcagtaca tcaagtgtat catatgccaa 1080

gtacgccccc tattgacgtc aatgacggta aatggcccgc ctggcattat gcccagtaca 1140

tgaccttatg ggactttcct acttggcagt acatctacgt attagtcatc gctattacca 1200

tggtgatgcg gttttggcag tacatcaatg ggcgtggata gcggtttgac tcacggggat 1260

ttccaagtct ccaccccatt gacgtcaatg ggagtttgtt ttggcaccaa aatcaacggg 1320

actttccaaa atgtcgtaac aactccgccc cattgacgca aatgggcggt aggcgtgtac 1380

ggtgggaggt ctatataagc agagctcgtt tagtgaaccg tcagatcgcc tggagacgcc 1440

atccacgctg ttttgacctc catagaagat accgggaccg atccagcctc cgcggccggg 1500

aacggtgcat tggaacgcgg attccccgtg ccaagagtga ccctggcaga actcggtaag 1560

tctgttgaca tgtatgtgat gtatactaac ctgcatggga cgtggattta cttgtgtatg 1620

tcagatagag taaagattaa ctcttgcatg tgagcggggc atcgagatag cgataaatga 1680

gtcaggagga cggagcctct gctaaccatg ttcatgcctt cttcttttc ctacagctcc 1740

tgggcaacgt gctggttatt gtgctgtctc atcattttgg caaagaattt caccgtcctt 1800

gacacgaagt ttgctgccgc cacc 1824

<210> 651
<211> 2229
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 651
atattacccc taacacctgc caccccagtc ttaatcagtg gtggaagaac tctcagaact 60

gtttgtctca attggccatt taagtttaat agtgaaagac tggttaatga taacaatgca 120

tcggaaaacc ttcaggagga aaggagaatg ttttgtggaa cattttgtg tgtgtggcag 180

ttttaagtta ttagttttca aaatcagtac tttttaatgg aaacaacttg accaaaaatc 240

tgtcacagaa ttttgaaccc attaaaatac aagtttaatg agaagtctgt ctctgttaat 300

gctgaagtca ttactaagtg cttagcttag caaggtatgt ggatgcccat ttgtgttcca 360

agggattgga ctgttcatca ggacccagag ctgtgtatac tctatattat actctatgtt 420

atactctgta atcctactca ataaacgtgt cacgcctgtg aaaccgtact aagtctcccg 480

tgtcttctta tcaccatcag gtgacatcct cgcccaggct gtcaatcatg ccggtatcga 540

ttccagtagc accggcccca cgctgacaac ccactcttgc agcgttagca gcgcccctct 600

taacaagccg acccccacca gcgtcgcggt tactaacact cctctccccg gggcatccgc 660

tactcccgag ctcgttaaat gagaaacctg tgtgttcctt tggggcgggg ctgacgtcgg 720

gaggtggcct ccacgggaag ggacacccgg atctcgacac agccttggca gtggagtcag 780

gaagggtagg acagattctg gacgccctct tggccagtcc tcaccgcccc acccccgatg 840

gagccgagag taattcatac aaaaggaggg atcgccttcg cccctgggaa tcccagggac 900

cgtcgctaaa ttctggccgg cctcccagcc cggaaccgct gtgcccgccc agcgcggcgg 960

gaggagcctg cgcctagggc ggatcgcggg tcggcgggag agcacaagcc cacagtcccc 1020

ggcggtgggg gaggggcgcg ctgagcgggg gcccgggagc cagcgcgggg caaactggga 1080

aagtggtgtc gtgtgctggc tccgccctct tcccgagggt gggggagaac ggtataaaag 1140

tgcggtagtc gcgttggacg ttctttttcg caacgggttt gccgtcagaa cgcaggtgag 1200

tggcgggtgt ggcctccgcg ggcccgggct ccctcctttg agcggggtcg gaccgccgtg 1260

cgggtgtcgt cggccgggct tctctgcgag cgttcccgcc ctggatggcg ggctgtgcgg 1320

gagggcgagg gggggaggcc tggcggcggc cccggagcct cgcctcgtgt cgggcgtgag 1380

gcctagcgtg gcttccgccc cgccgcgtgc caccgcggcc gcgctttgct gtctgcccgg 1440

ctgccctcga ttgcctgccc gcggcccggg ccaacaaagg gagggcgtgg agctggctgg 1500

tagggagccc cgtagtccgc atgtcgggca gggagagcgg cagcagtcgg gggggggacc 1560

gggcccgccc gtcccgcagc acatgtccga cgccgcctgg acgggtagcg gcctgtgtcc 1620

tgataaggcg gccgggcggt gggttttaga tgccgggttc aggtggcccc gggtcccggc 1680

ccggtctggc cagtaccccg tagtggctta gctccgagga gggcgagccc gcccgcccgg 1740

caccagttgc gtgcgcggaa agatggccgc tcccgggccc tgtagcaagg agctcaaaat 1800

ggaggacgcg gcagcccggc ggagcggggc gggtgagtca cccacacaaa ggaagagggc 1860

cttgcccctc gccggccgct gcttcctgtg accccgtggt gtaccggccg cacttcagtc 1920

accccgggcg ctctttcgga gcaccgctgg cctccgctgg gggaggggat ctgtctaatg 1980

gcgttggagt ttgctcacat ttggtgggtg gagactgtag ccaggccagc ctggccatgg 2040

aagtaattct tggaatttgc ccattttgag tttggagcga agctgattga caaagctgct 2100

tagccgttca aaggtattct tcgaactttt tttttaaggt gttgtgaaaa ccaccgctaa 2160

ttcaaatcca acagcttgct tgttcttttt gcagaagctc agaataaacg ctcaactttg 2220

gccgccacc 2229

<210> 652
<211> 1824
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 652
ccacagacct ggtgaccgtc aggaagaaga ttcagtgaga ggacacgagg tatgtcatgg 60

tttttaatca ataaataaag aggttttatt catcggacag tcgttgtagc ctgtaaaaga 120

ctcgccccgg agggggttcc cccgatgtga ggggcatgca gtagtatggt gtcctgagtg 180

tctcggatgc gtccttgaac tcgcactcta ccgccgtggg ggttaataaa gttttgctgc 240

gccggtaggg ggggaggccg aggataataa agttgctacg tactggttga agtctaacaa 300

tctctcgggg ggatcccctc tcccggccag aggagcaagg tatgcgggag gcgaccagga 360

ggatagcggg gctgacgtcg ggaggtggcc tccgtgggaa ggacacccgg atcttgacac 420

agccttggca gcggagtcag gaagagtagg ggtaggttct ggacgccctc ttggccagct 480

catcgccgcc ccaccctctg ctggagcaca gagtaattca tacaaaagga gggatcgcct 540

tcgcaagggg agagcccagg gaccgtccct aaattctcac agacccaaat ccctgtagcc 600

gccccacgac agcgcgagga gcatgcgccc agggctgagc gcgggtagat cagagcacac 660

aagctcacag tccccggcgg tgggggggagg ggcgcgctga gcgggggcca gggagctggc 720

gcggggcaaa ctgggaaagt ggtgtcgtgt gctggctccg ccctcttccc gagggtgggg 780

gagaacggta tataagtgcg gtagtcgcct tggacgttct ttttcgcaac gggtttgccg 840

tcagaacgca ggtgagtggc gggtgtggct tccgcgggcc ccggagctgg agccctgctc 900

tgagcgggcc gggctgatat gcgagtgtcg tccgcagggt ttagctgtga gcattcccac 960

ttcgagtggc gggcggtgcg ggggtgagag tgcgaggcct agcggcaacc ccgtagcctc 1020

gcctcgtgtc cggcttgagg cctagcgtgg tgtccgccgc cgcgtgccac tccggccgca 1080

ctatgcgttt tttgtccttg ctgccctcga ttgccttcca gcagcatggg ctaacaaagg 1140

gagggtgtgg ggctcactct taaggagccc atgaagctta cgttggatag gaatggaagg 1200

gcaggagggg cgactggggc ccgcccgcct tcggagcaca tgtccgacgc cacctggatg 1260

gggcgaggcc tgtggctttc cgaagcaatc gggcgtgagt ttagcctacc tgggccatgt 1320

ggccctagca ctgggcacgg tctggcctgg cggtgccgcg ttcccttgcc tcccaacaag 1380

ggtgaggccg tcccgcccgg caccagttgc ttgcgcggaa agatggccgc tcccggggcc 1440

ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg tggagcgggc gggtgagtca 1500

cccacacaaa ggaagagggc cttgcccctc gccggccgct gcttcctgtg accccgtggt 1560

ctatcggccg catagtcacc tcgggcttct cttgagcacc gctcgtcgcg gcgggggggag 1620

gggatctaat ggcgttggag tttgttcaca tttggtgggt ggagactagt caggccagcc 1680

tggcgctgga agtcattctt ggaatttgcc cctttgagtt tggagcgagg ctaattctca 1740

agcctcttag cggttcaaag gtattttcta aacccgtttc caggtgttgt gaaagccacc 1800

gctaattcaa agcaagccgc cacc 1824

<210> 653
<211> 2344
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 653
atattacccc taacacctgc caccccagtc ttaatcagtg gtggaagaac tctcagaact 60

gtttgtctca attggccatt taagtttaat agtgaaagac tggttaatga taacaatgca 120

tcggaaaacc ttcaggagga aaggagaatg ttttgtggaa cattttgtg tgtgtggcag 180

ttttaagtta ttagttttca aaatcagtac tttttaatgg aaacaacttg accaaaaatc 240

tgtcacagaa ttttgaaccc attaaaatac aagtttaatg agaagtctgt ctctgttaat 300

gctgaagtca ttactaagtg cttagcttag caaggtatgt ggatgcccat ttgtgttcca 360

agggattgga ctgttcatca ggacccagag ctgatccaca agcccagctc cccacccatc 420

accatggaca atgtttttt actaacactt ggacaatgat ggatactttt ttactaacac 480

ttggacaatg atgatgatac actcctcact tgcccactta gacacaatta ctaacaccac 540

acccccctctt ttatttctct gtacttaatg ttttctgaat aaagtgatcc tattgtaccc 600

acattaaaga cttctttaac tctttatggt tcacaggacc cgagatgaac atagatattg 660

ttacagcagc ggcctccatg tcaggtataa ctactgcctc acacagcgcc ctgccaatca 720

gaaggttaaa tgagaaacct gtgtgttcct ttggggccgc catatactga gtcattaggg 780

actttccaat gggttttgcc cagtacataa ggtcaatagg ggtgaatcaa caggaaagtc 840

ccattggagc caagtacact gagtcaatag ggactttcca ttgggttttg cccagtacaa 900

aaggtcaata gggggtgagt caatgggttt ttcccattat tggcacgtac ataaggtcaa 960

taggggtgag tcattgggtt tttccagcca atttataaaa cgccatgtac tttcccacca 1020

ttgacgtcaa tgggctattg aaactaatgc aacgtgacct ttaaacggta ctttcccata 1080

gctgattaat gggaaagtac cgttctcgag ccaatacacg tcaatgggaa gtgaaagggc 1140

agccaaaacg taacaccgcc ccggttttcc cctggaaatt ccatattggc acgcattcta 1200

ttggctgagc tgcgttctac gtgggtataa gaggcgcgac cagcgtcggt agggaccggt 1260

ttgccgccag aacacagctt tttcgcaacg ggtttgccgt cagaacgcag gtgagtggcg 1320

ggtgtggcct ccgcgggccc gggctccctc ctttgagcgg ggtcggaccg ccgtgcgggt 1380

gtcgtcggcc gggcttctct gcgagcgttc ccgccctgga tggcgggctg tgcgggaggg 1440

cgagggggggg aggcctggcg gcggccccgg agcctcgcct cgtgtcgggc gtgaggccta 1500

gcgtggcttc cgccccgccg cgtgccaccg cggccgcgct ttgctgtctg cccggctgcc 1560

ctcgattgcc tgcccgcggc ccgggccaac aaagggaggg cgtggagctg gctggtaggg 1620

agccccgtag tccgcatgtc gggcagggag agcggcagca gtcgggggggg ggaccgggcc 1680

cgcccgtccc gcagcacatg tccgacgccg cctggacggg tagcggcctg tgtcctgata 1740

aggcggccgg gcggtgggtt ttagatgccg ggttcaggtg gccccgggtc ccggcccggt 1800

ctggccagta ccccgtagtg gcttagctcc gaggagggcg agcccgcccg cccggcacca 1860

gttgcgtgcg cggaaagatg gccgctcccg ggccctgtag caaggagctc aaaatggagg 1920

acgcggcagc ccggcggagc ggggcgggtg agtcacccac acaaaggaag agggccttgc 1980

ccctcgccgg ccgctgcttc ctgtgacccc gtggtgtacc ggccgcactt cagtcacccc 2040

gggcgctctt tcggagcacc gctggcctcc gctgggggag gggatctgtc taatggcgtt 2100

ggagtttgct cacatttggt gggtggagac tgtagccagg ccagcctggc catggaagta 2160

attcttggaa tttgcccatt ttgagtttgg agcgaagctg attgacaaag ctgcttagcc 2220

gttcaaaggt attcttcgaa ctttttttttt aaggtgttgt gaaaaccacc gctaattcaa 2280

atccaacagc ttgcttgttc tttttgcaga agctcagaat aaacgctcaa ctttggccgc 2340

cacc 2344

<210> 654
<211> 1088
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 654
atccacaagc ccagctcccc acccatcacc atggacaatg ttttttttact aacacttgga 60

caatgatgga tacttttttta ctaacacttg gacaatgatg atgatacact cctcacttgc 120

ccacttagac acaattacta acaccacacc ccctctttta tttctctgta cttaatgttt 180

tctgaataaa gtgatcctat tgtacccaca ttaaagactt ctttaactct ttatggttca 240

caggacccga gatgaacata gatattgtta cagcagcggc ctccatgtca ggtataacta 300

ctgcctcaca cagcgccctg ccaatcagaa ggatctggcc gccatatact gagtcattag 360

ggactttcca atgggttttg cccagtacat aaggtcaata ggggtgaatc aacaggaaag 420

tcccattgga gccaagtaca ctgagtcaat agggactttc cattgggttt tgcccagtac 480

aaaaggtcaa tagggggtga gtcaatgggt ttttcccatt attggcacgt acataaggtc 540

aatagggggtg agtcattggg tttttccagc caatttataa aacgccatgt actttcccac 600

cattgacgtc aatgggctat tgaaactaat gcaacgtgac ctttaaacgg tactttccca 660

tagctgatta atgggaaagt accgttctcg agccaataca cgtcaatggg aagtgaaagg 720

gcagccaaaa cgtaacaccg ccccggtttt cccctggaaa ttccatattg gcacgcattc 780

tattggctga gctgcgttct acgtgggtat aagaggcgcg accagcgtcg gtaccgtcgc 840

agtcttgggt ctgaccaccg tagaacgcag agctcctcgc tgtcagatcg cctggagacg 900

ccccgtgtct acccatcaga caagtaagtt tctgtttcca tttcctctct tgtgacacat 960

ttcatgactc tgcatttaca taacccctga ctcatggtct tcccactctt gttctctcag 1020

ggtgccagct cagcttgctt gttctttttg cagaagctca gaataaacgc tcaactttgg 1080

ccgccacc 1088

<210> 655
<211> 1073
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 655
ccacagacct ggtgaccgtc aggaagaaga ttcagtgaga ggacacgagg tatgtcatgg 60

tttttaatca ataaataaag aggttttatt catcggacag tcgttgtagc ctgtaaaaga 120

ctcgccccgg agggggttcc cccgatgtga ggggcatgca gtagtatggt gtcctgagtg 180

tctcggatgc gtccttgaac tcgcactcta ccgccgtggg ggttaataaa gttttgctgc 240

gccggtaggg ggggaggccg aggataataa agttgctacg tactggttga agtctaacaa 300

tctctcgggg ggatccgatc tggccgccat atactgagtc attagggact ttccaatggg 360

ttttgcccag tacataaggt caataggggt gaatcaacag gaaagtccca ttggagccaa 420

gtacactgag tcaataggga ctttccattg ggttttgccc agtacaaaag gtcaataggg 480

ggtgagtcaa tgggtttttc ccattattgg cacgtacata aggtcaatag gggtgagtca 540

ttgggttttt ccagccaatt tataaaacgc catgtacttt cccaccattg acgtcaatgg 600

gctattgaaa ctaatgcaac gtgaccttta aacggtactt tcccatagct gattaatggg 660

aaagtaccgt tctcgagcca atacacgtca atgggaagtg aaagggcagc caaaacgtaa 720

caccgccccg gttttcccct ggaaattcca tattggcacg cattctattg gctgagctgc 780

gttctacgtg ggtataagag gcgcgaccag cgtcggtacc gtcgcagtct tgggtctgac 840

caccgtagaa cgcagagctc ctcgctgtca gatcgcctgg agacgccccg tgtctaccca 900

tcagacaagt aagtttctgt ttccatttcc tctcttgtga cacatttcat gactctgcat 960

ttacataacc cctgactcat ggtcttccca ctcttgttct ctcagggtgc cagctcagct 1020

tgcttgttct ttttgcagaa gctcagaata aacgctcaac tttggccgcc acc 1073

<210> 656
<211> 1222
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 656
ccgcctagga cccacagacc tggtgaccgt caggaagaag attcagtgag aggacacgag 60

gtatgtcatg gtttttaatc aataaataaa gaggttttat tcatcggaca gtcgttgtag 120

cctgtaaaag actcgccccg gagggggttc ccccgatgtg aggggcatgc agtagtatgg 180

tgtcctgagt gtctcggatg cgtccttgaa ctcgcactct accgccgtgg gggttaataa 240

agttttgctg cgccggtagg gggggaggcc gaggataata aagttgctac gtactggttg 300

aagtctaaca atctctcggg gggatccgaa ttcgtttatc ggccaccgag gccaagatct 360

ggccgccaat tgattattga ctagttatta atagtaatca attacggggt cattagttca 420

tagcccatat atggagttcc gcgttacata acttacggta aatggcccgc ctggctgacc 480

gcccaacgac ccccgcccat tgacgtcaat aatgacgtat gttcccatag taacgccaat 540

agggactttc cattgacgtc aatgggtgga gtatttacgg taaactgccc acttggcagt 600

acatcaagtg tatcatatgc caagtccgcc ccctattgac gtcaatgacg gtaaatggcc 660

cgcctggcat tatgcccagt acatgacctt acgggacttt cctacttggc agtacatcta 720

cgtattagtc atcgctatta ccatggtgat gcggttttgg cagtacacca atgggcgtgg 780

atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca atgggagttt 840

gttttggcac caaaatcaac gggactttcc aaaatgtcgt aataaccccg ccccgttgac 900

gcaaatgggc ggtaggcgtg tacggtggga ggtctatata agcagagctc gtttagtgaa 960

ccgtcagatc tcgcagtctt gggtctgacc accgtagaac gcagagctcc tcgctgtcag 1020

atcgcctgga gacgccccgt gtctacccat cagacaagta agtttctgtt tccatttcct 1080

ctcttgtgac acatttcatg actctgcatt tacataaccc ctgactcatg gtcttcccac 1140

tcttgttctc tcagggtgcc agctcagctt gcttgttctt tttgcagaag ctcagaataa 1200

acgctcaact ttggccgcca cc 1222

<210> 657
<211> 1692
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 657
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaagg acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag attttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatctat tcggacggtg acgatatttg aaaatatggc 420

atattgaaaa tgtcgccgat gtgagtttct gtgtaactga tatcgccatt tttccaaaag 480

tgatttttgg gcatacgcga tatctggcga tagcgcttat atcgtttacg ggggatggcg 540

atagacgact ttggtgactt gggcgattct gtgtgtcgca aatatcgcag tttcgatata 600

ggtgacagac gatatgaggc tatatcgccg atagaggcga catcaagctg gcacatggcc 660

aatgcatatc gatctataca ttgaatcaat attggccatt agccatatta ttcattggtt 720

atatagcata aatcaatatt ggctattggc cattgcatac gttgtatcca tatcataata 780

tgtacattta tattggctca tgtccaacat taccgccatg ttgacgatct ggccgccata 840

tactgagtca ttagggactt tccaatgggt tttgcccagt acataaggtc aatagggtg 900

aatcaacagg aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg 960

gttttgccca gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc 1020

acgtacataa ggtcaatagg ggtgagtcat tgggtttttc agccaattt ataaaacgcc 1080

atgtactttc ccaccattga cgtcaatggg ctattgaaac taatgcaacg tgacctttaa 1140

acggtacttt cccatagctg attaatggga aagtaccgtt ctcgagccaa tacacgtcaa 1200

tgggaagtga aagggcagcc aaaacgtaac accgccccgg ttttcccctg gaaattccat 1260

attggcacgc attctattgg ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc 1320

gtcggtaccg tcgcagtctt gggtctgacc accgtagaac gcagagctcc tcgctgattg 1380

gaacgcggat tccccgtgcc aagagtgacc ctggcagaac tcggtaagtc tgttgacatg 1440

tatgtgatgt atactaacct gcatgggacg tggatttact tgtgtatgtc agatagagta 1500

aagattaact cttgcatgtg agcggggcat cgagatagcg ataaatgagt caggaggacg 1560

gagcctctgc taaccatgtt catgccttct tctttttcct acagctcctg ggcaacgtgc 1620

tggttattgt gctgtctcat cattttggca aagaatttca ccgtccttga cacgaagttt 1680

gctgccgcca cc 1692

<210> 658
<211> 1373
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 658
tgtatactct atattatact ctatgttata ctctgtaatc ctactcaata aacgtgtcac 60

gcctgtgaaa ccgtactaag tctcccgtgt cttcttatca ccatcaggtg acatcctcgc 120

ccaggctgtc aatcatgccg gtatcgattc cagtagcacc ggccccacgc tgacaaccca 180

ctcttgcagc gttagcagcg cccctcttaa caagccgacc cccaccagcg tcgcggttac 240

taacactcct ctccccgggg catccgctac tcccgagctc gatctggccg ccatatactg 300

agtcattagg gactttccaa tgggttttgc ccagtacata aggtcaatag gggtgaatca 360

acaggaaagt cccattggag ccaagtacac tgagtcaata gggactttcc attgggtttt 420

gcccagtaca aaaggtcaat agggggtgag tcaatgggtt tttcccatta ttggcacgta 480

cataaggtca ataggggtga gtcattgggt ttttccagcc aatttataaa acgccatgta 540

ctttcccacc attgacgtca atgggctatt gaaactaatg caacgtgacc tttaaacggt 600

actttcccat agctgattaa tgggaaagta ccgttctcga gccaatacac gtcaatggga 660

agtgaaaggg cagccaaaac gtaacaccgc cccggttttc ccctggaaat tccatattgg 720

cacgcattct attggctgag ctgcgttcta cgtgggtata agaggcgcga ccagcgtcgg 780

taccgtcgca gtcttgggtc tgaccaccgt agaacgcaga gctcctcgct gtcagatcct 840

cactctcttc cgcatcgctg tctgcgaggg ccagctgttg ggctcgcggt tgaggacaaa 900

ctcttcgcgg tctttccagt actcttggat cggaaacccg tcggcctccg aacggtactc 960

cgccaccgag ggacctgagc gagtccgcat cgaccggatc ggaaaacctc tcgagaaagg 1020

cgtctaacca gtcacagtcg caaggtaggc tgagcaccgt ggcgggcggc agcgggtggc 1080

ggtcggggtt gtttctggcg gaggtgctgc tgatgatgta attaaagtag gcggtcttga 1140

gacggcggat ggtcgaggtg aggtgtggca ggcttgagat ccagctgttg gggtgagtac 1200

tccctctcaa aagcgggcat tacttctgcg ctaagattgt cagtttccaa aaacgaggag 1260

gatttgatat tcacctggcc cgatctggcc atacacttga gtgacaatga catccacttt 1320

gcctttctct ccacaggtgt ccactcccag gtccaagttt aaacgccgcc acc 1373

<210> 659
<211> 1785
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 659
atctgtatac tctatattat actctatgtt atactctgta atcctactca ataaacgtgt 60

cacgcctgtg aaaccgtact aagtctcccg tgtattctta tcaccatcag gtgacatcct 120

cgcccaggct gtcaatcatg ccggtatcga ttccagtagc accggcccca cgctgacaac 180

ccactcttgc agcgttagca gcgcccctct taacaagccg acccccacca gcgtcgcggt 240

tactaacact cctctccccg gggcatccgc tactcccgag ctcgaattcg tttatcggcc 300

accgaggcca agatctggcc gccaagcggg gctgacgtcg ggaggtggcc tccgtgggaa 360

gggacacccg gatcttgaca cagccttggc agcggagtaa ggaagagtag ggatagattc 420

tggccgccct cttggccagc ttctcgccgc cccaccctcc gctagggcca agagtaattc 480

atacaaaagg agggatcgcc ttcgcaaggg gagagcccag ggaccgtccc taaattctca 540

cagacccaaa tccctgtagc cgccccacga cagcgcgagg agcatgcgct cagggctgag 600

cgcggggaga gcagagcaca caagctcata gaccctggtc gtgggggggga ggaccgggga 660

gctggcgcgg ggcaaactgg gaaagcggtg tcgtgtgctg gctccgccct cttcccgagg 720

gtgggggaga acggtatata agtgcggcag tcgccttgga cgttcttttt cgcaacgggt 780

ttgccgtcag aacgcaggtg aggggcgggt gtggcttccg cgggccgccg agctggaggt 840

cctgctccga gcgggccggg ccccgctgtc gtcggcgggg attagctgcg agcattcccg 900

cttcgagttg cgggcggcgc gggaggcaga gtgcgaggcc tagcggcaac cccgtagcct 960

cgcctcgtgt ccggcttgag gcctagcgtg gtgtccgcgc cgccgccgcg tgctactccg 1020

gccgcactct ggtctttttt tttttgttgt tgttgccctg ctgccttcga ttgccgttca 1080

gcaatagggg ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc ggagaggtca 1140

tggttgggga ggaatggagg gacaggagtg gcggctgggg cccgcccgcc ttcggagcac 1200

atgtccgacg ccacctggat ggggcgaggc ctggggtttt tcccgaagca accaggctgg 1260

ggttagcgtg ccgaggccat gtggccccag cacccggcac gatctggctt ggcggcgccg 1320

cgttgccctg cctccctaac tagggtgagg ccatcccgtc cggcaccagt tgcgtgcgtg 1380

gaaagatggc cgctcccggg ccctgttgca aggagctcaa aatggaggac gcggcagccc 1440

ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gcctggtccc tcaccggctg 1500

ctgcttcctg tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc ttttgagcac 1560

ggctagtcgc ggcgggggga ggggatgtaa tggcgttgga gtttgttcac atttggtggg 1620

tggagactag tcaggccagc ctggcgctgg aagtcatttt tggaatttgt ccccttgagt 1680

tttgagcgga gctaattctc gggcttctta gcggttcaaa ggtatctttt aaaccctttt 1740

ttaggtgttg tgaaaaccac cgctaattca aagcaagccg ccacc 1785

<210> 660
<211> 1725
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 660
atctgtatac tctatattat actctatgtt atactctgta atcctactca ataaacgtgt 60

cacgcctgtg aaaccgtact aagtctcccg tgtattctta tcaccatcag gtgacatcct 120

cgcccaggct gtcaatcatg ccggtatcga ttccagtagc accggcccca cgctgacaac 180

ccactcttgc agcgttagca gcgcccctct taacaagccg acccccacca gcgtcgcggt 240

tactaacact cctctccccg gggcatccgc tactcccgag ctcgaattcg tttatcggcc 300

accgaggcca agatctggcc gccaacccgc cccgaccgga gctgagagta attcatacaa 360

aaggactcgc ccctgccttg gggaatccca gggaccgtcg ttaaactccc actaacgtag 420

aacccagaga tcgctgcgtt cccgcccccc cacccgcccg ctctcgtcat cactgaggtg 480

gagaatagca tgcgtgaggc tccggtgccc gtcagtgggc agagcgcaca tcgcccacag 540

tccccgagaa gttgggggga ggggtcggca attgaacggg tgcctagaga aggtggcgcg 600

gggtaaactg ggaaagtgat gtcgtgtact ggctccgcct ttttcccgag ggtgggggag 660

aaccgtatat aagtgcagta gtcgccgtga acgttctttt tcgcaacggg tttgccgcca 720

gaacacaggt aagtgccgtg tgtggttccc gcgggcctgg cctctttacg ggttatggcc 780

cttgcgtgcc ttgaattact tccacctggc tccagtacgt gattcttgat cccgagctgg 840

agccaggggc gggccttgcg ctttaggagc cccttcgcct cgtgcttgag ttgaggcctg 900

gcctgggcgc tggggccgcc gcgtgcgaat ctggtggcac cttcgcgcct gtctcgctgc 960

tttcgataag tctctagcca tttaaaattt ttgatgacgt gctgcgacgc tttttttctg 1020

gcaagatagt cttgtaaatg cgggccagga tctgcacact ggtatttcgg tttttgggcc 1080

cgcggccggc gacggggccc gtgcgtccca gcgcacatgt tcggcgaggc ggggcctgcg 1140

agcgcggcca ccgagaatcg gacgggggta gtctcaagct ggccggcctg ctctggtgcc 1200

tggcctcgcg ccgccgtgta tcgccccgcc ctgggcggca aggctggccc ggtcggcacc 1260

agttgcgtga gcggaaagat ggccgcttcc cggccctgct ccaggggct caaaatggag 1320

gacgcggcgc tcgggagagc gggcgggtga gtcacccaca caaaggaaaa gggcctttcc 1380

gtcctcagcc gtcgcttcat gtgactccac ggagtaccgg gcgccgtcca ggcacctcga 1440

ttagttctgg agcttttgga gtacgtcgtc tttaggttgg ggggaggggt tttatgcgat 1500

ggagtttccc cacactgagt gggtggagac tgaagttagg ccagcttggc acttgatgta 1560

attctccttg gaatttggcc tttttgagtt tggatcttgg ttcattctca agcctcagac 1620

agtggttcaa agtttttttc ttccatttca ggtgtcgtga aaactaccag cttgcttgtt 1680

ctttttgcag aagctcagaa taaacgctca actttggccg ccacc 1725

<210> 661
<211> 2451
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 661
atcataacag gcctattgat tggaaagttt gtcaacgaat tgtgggtctt ttggggtttg 60

ctgccccttt tacgcaatgt ggatatcctg ctttaatgcc tttatatgca tgtatacaag 120

caaaacaggc ttttactttc tcgccaactt acaaggcctt tctcagtaaa cagtatatga 180

ccctttaccc cgttgctcgg caacggcctg gtctgtgcca agtgtttgct gacgcaaccc 240

ccactggttg gggcttggcc ataggccatc agcgcatgcg tggaaccttt gtgtctcctc 300

tgccgatcca tactgcggaa ctcctagccg cttgttttgc tcgcacctgg agtggagcaa 360

acctcatcgg gaccgacaat tctgtcgtac tctcccgcaa gtcatcatcg tttccttggc 420

tgctaggctg tgctgccaac tggatcctgc gcgggacgtc ctttgtttac gtcccgtcgg 480

cgctgaatcc cgcggacgac ccctcccggg gccgcttggg gctctaccgc ccgcttctcc 540

gtctgccgta ccgtccgacc acggggcgca cctctcttta cgcggactcc ccgtctgtgc 600

cttctcatct gccggaccgt gtgcacttcg cttcacctct gcacgtcgca tggaggccac 660

cgtgaacgcc caccggaact tgcccaaggt cttgcataag aggactcttg gactttcagc 720

aatgtcatct gtatactcta tattatactc tatgttatac tctgtaatcc tactcaataa 780

acgtgtcacg cctgtgaaac cgtactaagt ctcccgtgta ttcttatcac catcaggtga 840

catcctcgcc caggctgtca atcatgccgg tatcgattcc agtagcaccg gccccacgct 900

gacaacccac tcttgcagcg ttagcagcgc ccctcttaac aagccgaccc ccaccagcgt 960

cgcggttact aacactcctc tccccggggc atccgctact cccgagctcg aattcgttta 1020

tcggccaccg aggccaagat ctggccgcca acccgccccg accggagctg agagtaattc 1080

atacaaaagg actcgcccct gccttgggga atcccaggga ccgtcgttaa actcccacta 1140

acgtagaacc cagagatcgc tgcgttcccg ccccctcacc cgcccgctct cgtcatcact 1200

gaggtggaga atagcatgcg tgaggctccg gtgcccgtca gtgggcagag cgcacatcgc 1260

ccacagtccc cgagaagttg gggggagggg tcggcaattg aacgggtgcc tagagaaggt 1320

ggcgcggggt aaactgggaa agtgatgtcg tgtactggct ccgccttttt cccgagggtg 1380

ggggagaacc gtatataagt gcagtagtcg ccgtgaacgt tcttttcgc aacgggtttg 1440

ccgccagaac acaggtaagt gccgtgtgtg gttcccgcgg gcctggcctc tttacgggtt 1500

atggcccttg cgtgccttga attacttcca cctggctcca gtacgtgatt cttgatcccg 1560

agctggagcc aggggcgggc cttgcgcttt aggagcccct tcgcctcgtg cttgagttga 1620

ggcctggcct gggcgctggg gccgccgcgt gcgaatctgg tggcaccttc gcgcctgtct 1680

cgctgctttc gataagtctc tagccattta aaatttttga tgacgtgctg cgacgctttt 1740

tttctggcaa gatagtcttg taaatgcggg ccaggatctg cacactggta tttcggtttt 1800

tgggcccgcg gccggcgacg gggcccgtgc gtcccagcgc acatgttcgg cgaggcgggg 1860

cctgcgagcg cggccaccga gaatcggacg ggggtagtct caagctggcc ggcctgctct 1920

ggtgcctggc ctcgcgccgc cgtgtatcgc cccgccctgg gcggcaaggc tggcccggtc 1980

ggcaccagtt gcgtgagcgg aaagatggcc gcttcccggc cctgctccag ggggctcaaa 2040

atggaggacg cggcgctcgg gagagcgggc gggtgagtca cccacacaaa ggaaaagggc 2100

ctttccgtcc tcagccgtcg cttcatgtga ctccacggag taccgggcgc cgtccaggca 2160

cctcgattag ttctggagct tttggagtac gtcgtcttta ggttgggggg aggggtttta 2220

tgcgatggag tttccccaca ctgagtgggt ggagactgaa gttaggccag cttggcactt 2280

gatgtaattc tccttggaat ttggcctttt tgagtttgga tcttggttca ttctcaagcc 2340

tcagacagtg gttcaaagtt tttttcttcc atttcaggtg tcgtgaaaac taccagcttg 2400

cttgttcttt ttgcagaagc tcagaataaa cgctcaactt tggccgccac c 2451

<210> 662
<211> 1425
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 662
cttgctcacc tcgagtacga tagccggcta atcagccaat ccacaagccc agctccccac 60

ccatcaccat ggacaatgtt tttttactaa cacttggaca atgatggata ctttttttact 120

aacacttgga caatgatgat gatacactcc tcacttgccc acttagacac aattactaac 180

accacacccc ctcttttatt tctctgtact taatgttttc tgaataaagt gatcctattg 240

tacccacatt aaagacttct ttaactcttt atggttcaca ggacccgaga tgaacataga 300

tattgttaca gcagcggcct ccatgtcagg tataactact gcctcacaca gcgccctgcc 360

aatcagaagc atatcataat atgtacattt atattggctc atgtccaaca ttaccgccat 420

gttgacattg attattgact agttattaat agtaatcaat tacggggtca ttagttcata 480

gcccatatat ggagttccgc gttacataac ttacggtaaa tggcccgcct ggctgaccgc 540

ccaacgaccc ccgcccattg acgtcaataa tgacgtatgt tcccatagta acgccaatag 600

ggactttcca ttgacgtcaa tgggtggagt atttacggta aactgcccac ttggcagtac 660

atcaagtgta tcatatgcca agtacgcccc ctattgacgt caatgacggt aaatggcccg 720

cctggcatta tgcccagtac atgaccttat gggactttcc tacttggcag tacatctacg 780

tattagtcat cgctattacc atggtgatgc ggttttggca gtacatcaat gggcgtggat 840

agcggtttga ctcacgggga tttccaagtc tccaccccat tgacgtcaat gggagtttgt 900

tttggcacca aaatcaacgg gactttccaa aatgtcgtaa caactccgcc ccattgacgc 960

aaatgggcgg taggcgtgta cggtgggagg tctatataag cagagctcgt ttagtgaacc 1020

gtcagatcgc ctggagacgc catccacgct gttttgacct ccatagaaga taccgggacc 1080

gatccagcct ccgcggccgg gaacggtgca ttggaacgcg gattccccgt gccaagagtg 1140

accctggcag aactcggtaa gtctgttgac atgtatgtga tgtatactaa cctgcatggg 1200

acgtggattt acttgtgtat gtcagataga gtaaagatta actcttgcat gtgagcgggg 1260

catcgagata gcgataaatg agtcaggagg acggagcctc tgctaaccat gttcatgcct 1320

tcttcttttt cctacagctc ctgggcaacg tgctggttat tgtgctgtct catcattttg 1380

gcaaagaatt tcaccgtcct tgacacgaag tttgctgccg ccacc 1425

<210> 663
<211> 3133
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 663
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcacctggag 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt catcatcgtt 420

tccttggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcata ttatccctaa tacttgccac cccactctta atcagtggtg 780

gaagaacggt gtcagaactg tttgtttcaa ttggccattt aagtttagta gtaaaagact 840

ggttaatgat aacaatgcat cgtaaaacct tcagaaggaa aggagaatgt tttgtggacc 900

actttggttt tctttttgc gtgtggcagt tttaagttat tagtttttaa aatcagtact 960

ttttaatgga aacaacttga ccaaaaattt gtcacagaat tttgagatcc attaaaaaag 1020

ttaaatgaga aacctgtgtg ttcctttggt caacaccgag acatttaggt gaaagcatat 1080

actgagattg agattaactt cctgtgaaac ccagtgtctt agacaactgt ggcttgagca 1140

ccacctgttg gtattcatta caaacttgct cactacaata aatgaatttt aagctttaag 1200

atgaagtggc atttctttta acagttacta tgttggaatt ggttacaaat tttggagtgg 1260

actattgtat atatatatca gttactgtta tggatcccac gtcactattg tatactctat 1320

attatactct atgttatact ctgtaatcct actcaataaa cgtgtcacgc ctgtgaaacc 1380

gtactaagtc tcccgtgtct tgttatcacc atcaggtgac atcctcgccc aggctgtcaa 1440

tcatgccggt atcgattcca gtagcaccgg ccccacgctg acaacccact cttgcagcgt 1500

tagcagcgcc cctcttaaca agccgacccc caccagcgtc gcggttacta acactcctct 1560

ccccggggca tccgctactc ccgagctcga attcgtttat cggccaccga ggccaagatc 1620

tggccgccat atactgagtc attagggact ttccaatggg ttttgcccag tacataaggt 1680

caataggggt gaatcaacag gaaagtccca ttggagccaa gtacactgag tcaataggga 1740

ctttccattg ggttttgccc agtacaaaag gtcaataggg ggtgagtcaa tgggtttttc 1800

ccattattgg cacgtacata aggtcaatag gggtgagtca ttgggttttt ccagccaatt 1860

tataaaacgc catgtacttt cccaccattg acgtcaatgg gctattgaaa ctaatgcaac 1920

gtgaccttta aacggtactt tcccatagct gattaatggg aaagtaccgt tctcgagcca 1980

atacacgtca atgggaagtg aaagggcagc caaaacgtaa caccgccccg gttttcccct 2040

ggaaattcca tattggcacg cattctattg gctgagctgc gttctacgtg ggtataagag 2100

gcgcgaccag cgtcggtagg gaccggtttg ccgccagaac acaggtgagg ggcgggtgtg 2160

gcttccgcgg gccgccgagc tggaggtcct gctccgagcg ggccgggccc cgctgtcgtc 2220

ggcggggatt agctgcgagc attcccgctt cgagttgcgg gcggcgcggg aggcagagtg 2280

cgaggcctag cggcaacccc gtagcctcgc ctcgtgtccg gcttgaggcc tagcgtggtg 2340

tccgcgccgc cgccgcgtgc tactccggcc gcactctggt ctttttttt tttgttgttg 2400

ttgccctgct gccttcgatt gccgttcagc aataggggct aacaaaggga gggtgcgggg 2460

cttgctcgcc cggagcccgg agaggtcatg gttggggagg aatggaggga caggagtggc 2520

ggctggggcc cgcccgcctt cggagcacat gtccgacgcc acctggatgg ggcgaggcct 2580

ggggtttttc ccgaagcaac caggctgggg ttagcgtgcc gaggccatgt ggccccagca 2640

cccggcacga tctggcttgg cggcgccgcg ttgccctgcc tccctaacta gggtgaggcc 2700

atcccgtccg gcaccagttg cgtgcgtgga aagatggccg ctcccgggcc ctgttgcaag 2760

gagctcaaaa tggaggacgc ggcagcccgg tggagcgggc gggtgagtca cccacacaaa 2820

ggaagagggc ctggtccctc accggctgct gcttcctgtg accccgtggt cctatcggcc 2880

gcaatagtca cctcgggctt ttgagcacgg ctagtcgcgg cgggggggagg ggatgtaatg 2940

gcgttggagt ttgttcacat ttggtgggtg gagactagtc aggccagcct ggcgctggaa 3000

gtcatttttg gaatttgtcc ccttgagttt tgagcggagc taattctcgg gcttcttagc 3060

ggttcaaagg tatcttttaa acccttttttt aggtgttgtg aaaaccaccg ctaattcaaa 3120

gcaagccgcc acc 3133

<210> 664
<211> 3070
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 664
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cacctggagt ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagtc atcatcgttt ccttggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcatat tacccctaac acctgccacc ccagtcttaa tcagtggtgg aagaactctc 780

agaactgttt gtctcaattg gccatttaag tttaatagtg aaagactggt taatgataac 840

aatgcatcgg aaaaccttca ggaggaaagg agaatgtttt gtggaacatt tttgtgtgtg 900

tggcagtttt aagttattag ttttcaaaat cagtactttt taatggaaac aacttgacca 960

aaaatctgtc acagaatttt gaacccatta aaatacaagt ttaatgagaa gtctgtctct 1020

gttaatgctg aagtcattac taagtgctta gcttagcaag gtatgtggat gcccatttgt 1080

gttccaaggg attggactgt tcatcaggac ccagagctga tccacaagcc cagctcccca 1140

cccatcacca tggacaatgt ttttttacta acacttggac aatgatggat actttttac 1200

taacacttgg acaatgatga tgatacactc ctcacttgcc cacttagaca caattactaa 1260

caccacaccc cctcttttat ttctctgtac ttaatgtttt ctgaataaag tgatcctatt 1320

gtacccacat taaagacttc tttaactctt tatggttcac aggacccgag atgaacatag 1380

atattgttac agcagcggcc tccatgtcag gtataactac tgcctcacac agcgccctgc 1440

caatcagaag gttaaatgag aaacctgtgt gttcctttgg ggccgccata tactgagtca 1500

ttagggactt tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg 1560

aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg gttttgccca 1620

gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa 1680

ggtcaatagg ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc 1740

ccaccattga cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt 1800

cccatagctg attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga 1860

aagggcagcc aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc 1920

attctattgg ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaggg 1980

accggtttgc cgccagaaca cagcttttc gcaacgggtt tgccgtcaga acgcaggtga 2040

gtggcgggtg tggcctccgc gggcccgggc tccctccttt gagcggggtc ggaccgccgt 2100

gcgggtgtcg tcggccgggc ttctctgcga gcgttcccgc cctggatggc gggctgtgcg 2160

ggagggcgag ggggggaggc ctggcggcgg ccccggagcc tcgcctcgtg tcgggcgtga 2220

ggcctagcgt ggcttccgcc ccgccgcgtg ccaccgcggc cgcgctttgc tgtctgcccg 2280

gctgccctcg attgcctgcc cgcggcccgg gccaacaaag ggagggcgtg gagctggctg 2340

gtagggagcc ccgtagtccg catgtcgggc agggagagcg gcagcagtcg ggggggggac 2400

cgggcccgcc cgtcccgcag cacatgtccg acgccgcctg gacgggtagc ggcctgtgtc 2460

ctgataaggc ggccgggcgg tgggttttag atgccgggtt caggtggccc cgggtcccgg 2520

cccggtctgg ccagtacccc gtagtggctt agctccgagg agggcgagcc cgcccgcccg 2580

gcaccagttg cgtgcgcgga aagatggccg ctcccgggcc ctgtagcaag gagctcaaaa 2640

tggaggacgc ggcagcccgg cggagcgggg cgggtgagtc acccacacaa aggaagaggg 2700

ccttgcccct cgccggccgc tgcttcctgt gaccccgtgg tgtaccggcc gcacttcagt 2760

caccccgggc gctctttcgg agcaccgctg gcctccgctg ggggagggga tctgtctaat 2820

ggcgttggag tttgctcaca tttggtgggt ggagactgta gccaggccag cctggccatg 2880

gaagtaattc ttggaatttg cccattttga gtttggagcg aagctgattg acaaagctgc 2940

ttagccgttc aaaggtattc ttcgaacttt ttttttaagg tgttgtgaaa accaccgcta 3000

attcaaatcc aacagcttgc ttgttctttt tgcagaagct cagaataaac gctcaacttt 3060

ggccgccacc 3070

<210> 665
<211> 2546
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 665
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcacctggag 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt catcatcgtt 420

tccttggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatctgt atactctata ttatactcta tgttatactc tgtaatccta 780

ctcaataaac gtgtcacgcc tgtgaaaccg tactaagtct cccgtgtctt cttatcacca 840

tcaggtgaca tcctcgccca ggctgtcaat catgccggta tcgattccag tagcaccggc 900

cccacgctga caacccactc ttgcagcgtt agcagcgccc ctcttaacaa gccgaccccc 960

accagcgtcg cggttactaa cactcctctc cccggggcat ccgctactcc cgagctcgaa 1020

ttcgtttatc ggccaccgag gccaagatct ggccgccata tactgagtca ttagggactt 1080

tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg aaagtcccat 1140

tggagccaag tacactgagt caatagggac tttccattgg gttttgccca gtacaaaagg 1200

tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa ggtcaatagg 1260

ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc ccaccattga 1320

cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt cccatagctg 1380

attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga aagggcagcc 1440

aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc attctattgg 1500

ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaggg accggtttgc 1560

cgccagaaca caggtgagtg gcgggtgtgg cttccgcggg ccccggagct ggagccctgc 1620

tctgagcggg ccgggctgat atgcgagtgt cgtccgcagg gtttagctgt gagcattccc 1680

acttcgagtg gcgggcggtg cgggggtgag agtgcgaggc ctagcggcaa ccccgtagcc 1740

tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcc gccgcgtgcc actccggccg 1800

cactatgcgt tttttgtcct tgctgccctc gattgccttc cagcagcatg ggctaacaaa 1860

gggagggtgt ggggctcact cttaaggagc ccatgaagct tacgttggat aggaatggaa 1920

gggcaggagg ggcgactggg gcccgcccgc cttcggagca catgtccgac gccacctgga 1980

tggggcgagg cctgtggctt tccgaagcaa tcgggcgtga gtttagccta cctgggccat 2040

gtggccctag cactgggcac ggtctggcct ggcggtgccg cgttcccttg cctcccaaca 2100

agggtgaggc cgtcccgccc ggcaccagtt gcttgcgcgg aaagatggcc gctcccgggg 2160

ccctgttgca aggagctcaa aatggaggac gcggcagccc ggtggagcgg gcgggtgagt 2220

cacccacaca aaggaagagg gccttgcccc tcgccggccg ctgcttcctg tgaccccgtg 2280

gtctatcggc cgcatagtca cctcgggctt ctcttgagca ccgctcgtcg cggcgggggg 2340

aggggatcta atggcgttgg agtttgttca catttggtgg gtggagacta gtcaggccag 2400

cctggcgctg gaagtcattc ttggaatttg ccccctttgag tttggagcga ggctaattct 2460

caagcctctt agcggttcaa aggtattttc taaacccgtt tccaggtgtt gtgaaaacca 2520

ccgctaattc aaagcaagcc gccacc 2546

<210> 666
<211> 3175
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 666
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cacctggagt ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagtc atcatcgttt ccttggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcatat tatccctaat acttgccacc ccactcttaa tcagtggtgg aagaacggtg 780

tcagaactgt ttgtttcaat tggccattta agtttagtag taaaagactg gttaatgata 840

acaatgcatc gtaaaacctt cagaaggaaa ggagaatgtt ttgtggacca ctttggtttt 900

ctttttgcg tgtggcagtt ttaagttatt agtttttaaa atcagtactt tttaatggaa 960

acaacttgac caaaaatttg tcacagaatt ttgagatcca ttaaaaaagt taaatgagaa 1020

acctgtgtgt tcctttggtc aacaccgaga catttaggtg aaagcatata ctgagattga 1080

gattaacttc ctgtgaaacc cagtgtctta gacaactgtg gcttgagcac cacctgttgg 1140

tattcattac aaacttgctc actacaataa atgaatttta agctttaaga tgaagtggca 1200

tttcttttaa cagttactat gttggaattg gttacaaatt ttggagtgga ctattgtata 1260

tatatatcag ttactgttat ggatcccacg tcactattgt atactctata ttatactcta 1320

tgttatactc tgtaatccta ctcaataaac gtgtcacgcc tgtgaaaccg tactaagtct 1380

cccgtgtctt gttatcacca tcaggtgaca tcctcgccca ggctgtcaat catgccggta 1440

tcgattccag tagcaccggc cccacgctga caacccactc ttgcagcgtt agcagcgccc 1500

ctcttaacaa gccgaccccc accagcgtcg cggttactaa cactcctctc cccggggcat 1560

ccgctactcc cgagctctcc tttggggccg ccatatactg agtcattagg gactttccaa 1620

tgggttttgc ccagtacata aggtcaatag gggtgaatca acaggaaagt cccattggag 1680

ccaagtacac tgagtcaata gggactttcc attgggtttt gcccagtaca aaaggtcaat 1740

agggggtgag tcaatgggtt tttcccatta ttggcacgta cataaggtca ataggggtga 1800

gtcattgggt ttttccagcc aatttataaa acgccatgta ctttcccacc attgacgtca 1860

atgggctatt gaaactaatg caacgtgacc tttaaacggt actttcccat agctgattaa 1920

tgggaaagta ccgttctcga gccaatacac gtcaatggga agtgaaaggg cagccaaaac 1980

gtaacaccgc cccggttttc ccctggaaat tccatattgg cacgcattct attggctgag 2040

ctgcgttcta cgtgggtata agaggcgcga ccagcgtcgg tagggaccgg tttgccgcca 2100

gaacacagct ttttcgcaac gggtttgccg tcagaacgca ggtgagtggc gggtgtggcc 2160

tccgcgggcc cgggctccct cctttgagcg gggtcggacc gccgtgcggg tgtcgtcggc 2220

cgggcttctc tgcgagcgtt cccgccctgg atggcgggct gtgcgggagg gcgaggggg 2280

gaggcctggc ggcggccccg gagcctcgcc tcgtgtcggg cgtgaggcct agcgtggctt 2340

ccgccccgcc gcgtgccacc gcggccgcgc tttgctgtct gcccggctgc cctcgattgc 2400

ctgcccgcgg cccgggccaa caaagggagg gcgtggagct ggctggtagg gagccccgta 2460

gtccgcatgt cgggcaggga gagcggcagc agtcgggggg gggaccgggc ccgcccgtcc 2520

cgcagcacat gtccgacgcc gcctggacgg gtagcggcct gtgtcctgat aaggcggccg 2580

ggcggtgggt tttagatgcc gggttcaggt ggccccgggt cccggcccgg tctggccagt 2640

accccgtagt ggcttagctc cgaggagggc gagcccgccc gcccggcacc agttgcgtgc 2700

gcggaaagat ggccgctccc gggccctgta gcaaggagct caaaatggag gacgcggcag 2760

cccggcggag cggggcgggt gagtcaccca cacaaaggaa gagggccttg cccctcgccg 2820

gccgctgctt cctgtgaccc cgtggtgtac cggccgcact tcagtcaccc cgggcgctct 2880

ttcggagcac cgctggcctc cgctggggga ggggatctgt ctaatggcgt tggagtttgc 2940

tcacatttgg tgggtggaga ctgtagccag gccagcctgg ccatggaagt aattcttgga 3000

atttgcccat tttgagtttg gagcgaagct gattgacaaa gctgcttagc cgttcaaagg 3060

tattcttcga actttttttt taaggtgttg tgaaaaccac cgctaattca aatccaacag 3120

cttgcttgtt ctttttgcag aagctcagaa taaacgctca actttggccg ccacc 3175

<210> 667
<211> 3117
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 667
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcacctggag 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt catcatcgtt 420

tccttggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcata ttatccctaa tacttgccac cccactctta atcagtggtg 780

gaagaacggt gtcagaactg tttgtttcaa ttggccattt aagtttagta gtaaaagact 840

ggttaatgat aacaatgcat cgtaaaacct tcagaaggaa aggagaatgt tttgtggacc 900

actttggttt tctttttgc gtgtggcagt tttaagttat tagtttttaa aatcagtact 960

ttttaatgga aacaacttga ccaaaaattt gtcacagaat tttgagatcc attaaaaaag 1020

ttaaatgaga aacctgtgtg ttcctttggt caacaccgag acatttaggt gaaagcatat 1080

actgagattg agattaactt cctgtgaaac ccagtgtctt agacaactgt ggcttgagca 1140

ccacctgttg gtattcatta caaacttgct cactacaata aatgaatttt aagctttaag 1200

atgaagtggc atttctttta acagttacta tgttggaatt ggttacaaat tttggagtgg 1260

actattgtat atatatatca gttactgtta tggatcccac gtcactattg tatactctat 1320

attatactct atgttatact ctgtaatcct actcaataaa cgtgtcacgc ctgtgaaacc 1380

gtactaagtc tcccgtgtct tgttatcacc atcaggtgac atcctcgccc aggctgtcaa 1440

tcatgccggt atcgattcca gtagcaccgg ccccacgctg acaacccact cttgcagcgt 1500

tagcagcgcc cctcttaaca agccgacccc caccagcgtc gcggttacta acactcctct 1560

ccccggggca tccgctactc ccgagctcga attcgtttat cggccaccga ggccaagatc 1620

tggccgccat atactgagtc attagggact ttccaatggg ttttgcccag tacataaggt 1680

caataggggt gaatcaacag gaaagtccca ttggagccaa gtacactgag tcaataggga 1740

ctttccattg ggttttgccc agtacaaaag gtcaataggg ggtgagtcaa tgggtttttc 1800

ccattattgg cacgtacata aggtcaatag gggtgagtca ttgggttttt ccagccaatt 1860

tataaaacgc catgtacttt cccaccattg acgtcaatgg gctattgaaa ctaatgcaac 1920

gtgaccttta aacggtactt tcccatagct gattaatggg aaagtaccgt tctcgagcca 1980

atacacgtca atgggaagtg aaagggcagc caaaacgtaa caccgccccg gttttcccct 2040

ggaaattcca tattggcacg cattctattg gctgagctgc gttctacgtg ggtataagag 2100

gcgcgaccag cgtcggtagg gaccggtttg ccgccagaac acaggtgagt ggcgggtgtg 2160

gcttccgcgg gccccggagc tggagccctg ctctgagcgg gccgggctga tatgcgagtg 2220

tcgtccgcag ggtttagctg tgagcattcc cacttcgagt ggcgggcggt gcgggggtga 2280

gagtgcgagg cctagcggca accccgtagc ctcgcctcgt gtccggcttg aggcctagcg 2340

tggtgtccgc cgccgcgtgc cactccggcc gcactatgcg ttttttgtcc ttgctgccct 2400

cgattgcctt ccagcagcat gggctaacaa agggagggtg tggggctcac tcttaaggag 2460

cccatgaagc ttacgttgga taggaatgga agggcaggag gggcgactgg ggcccgcccg 2520

ccttcggagc acatgtccga cgccacctgg atggggcgag gcctgtggct ttccgaagca 2580

atcgggcgtg agtttagcct acctgggcca tgtggcccta gcactgggca cggtctggcc 2640

tggcggtgcc gcgttccctt gcctcccaac aagggtgagg ccgtcccgcc cggcaccagt 2700

tgcttgcgcg gaaagatggc cgctcccggg gccctgttgc aaggagctca aaatggagga 2760

cgcggcagcc cggtggagcg ggcgggtgag tcacccacac aaaggaagag ggccttgccc 2820

ctcgccggcc gctgcttcct gtgaccccgt ggtctatcgg ccgcatagtc acctcgggct 2880

tctcttgagc accgctcgtc gcggcggggg gaggggatct aatggcgttg gagtttgttc 2940

acatttggtg ggtggagact agtcaggcca gcctggcgct ggaagtcatt cttggaattt 3000

gcccctttga gtttggagcg aggctaattc tcaagcctct tagcggttca aaggtatttt 3060

ctaaacccgt ttccaggtgt tgtgaaaacc accgctaatt caaagcaagc cgccacc 3117

<210> 668
<211> 2730
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 668
ataacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg gggtttgctg 60

ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt atacaagcaa 120

aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag tatatgaccc 180

tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac gcaaccccca 240

ctggttgggg cttggccata ggccatcagc gcatgcgtgg aacctttgtg tctcctctgc 300

cgatccatac tgcggaactc ctagccgctt gttttgctcg cacctggagt ggagcaaacc 360

tcatcgggac cgacaattct gtcgtactct cccgcaagtc atcatcgttt ccttggctgc 420

taggctgtgc tgccaactgg atcctgcgcg ggacgtcctt tgtttacgtc ccgtcggcgc 480

tgaatcccgc ggacgacccc tcccggggcc gcttggggct ctaccgcccg cttctccgtc 540

tgccgtaccg tccgaccacg gggcgcacct ctctttacgc ggactccccg tctgtgcctt 600

ctcatctgcc ggaccgtgtg cacttcgctt cacctctgca cgtcgcatgg aggccaccgt 660

gaacgcccac cggaacttgc ccaaggtctt gcataagagg actcttggac tttcagcaat 720

gtcatcatat tatccctaat acttgccacc ccactcttaa tcagtggtgg aagaacggtg 780

tcagaactgt ttgtttcaat tggccattta agtttagtag taaaagactg gttaatgata 840

acaatgcatc gtaaaacctt cagaaggaaa ggagaatgtt ttgtggacca ctttggtttt 900

ctttttgcg tgtggcagtt ttaagttatt agtttttaaa atcagtactt tttaatggaa 960

acaacttgac caaaaatttg tcacagaatt ttgagatcca ttaaaaaagt taaatgagaa 1020

acctgtgtgt tcctttggtc aacaccgaga catttaggtg aaagcatata ctgagattga 1080

gattaacttc ctgtgaaacc cagtgtctta gacaactgtg gcttgagcac cacctgttgg 1140

tattcattac aaacttgctc actacaataa atgaatttta agctttaaga tgaagtggca 1200

tttcttttaa cagttactat gttggaattg gttacaaatt ttggagtgga ctattgtata 1260

tatatatcag ttactgttat ggatcccacg tcactattgt atactctata ttatactcta 1320

tgttatactc tgtaatccta ctcaataaac gtgtcacgcc tgtgaaaccg tactaagtct 1380

cccgtgtctt gttatcacca tcaggtgaca tcctcgccca ggctgtcaat catgccggta 1440

tcgattccag tagcaccggc cccacgctga caacccactc ttgcagcgtt agcagcgccc 1500

ctcttaacaa gccgaccccc accagcgtcg cggttactaa cactcctctc cccggggcat 1560

ccgctactcc cgagctctcc tttggggccg ccaattgatt attgactagt tattaatagt 1620

aatcaattac ggggtcatta gttcatagcc catatatgga gttccgcgtt acataactta 1680

cggtaaatgg cccgcctggc tgaccgccca acgacccccg cccattgacg tcaataatga 1740

cgtatgttcc catagtaacg ccaataggga ctttccattg acgtcaatgg gtggagtatt 1800

tacggtaaac tgcccacttg gcagtacatc aagtgtatca tatgccaagt ccgcccccta 1860

ttgacgtcaa tgacggtaaa tggcccgcct ggcattatgc ccagtacatg accttacggg 1920

actttcctac ttggcagtac atctacgtat tagtcatcgc tattaccatg gtgatgcggt 1980

tttggcagta caccaatggg cgtggatagc ggtttgactc acggggattt ccaagtctcc 2040

accccattga cgtcaatggg agtttgtttt ggcaccaaaa tcaacgggac tttccaaaat 2100

gtcgtaataa ccccgccccg ttgacgcaaa tgggcggtag gcgtgtacgg tgggaggtct 2160

atataagcag agctcgttta gtgaaccgtc agatcctcac tctcttccgc atcgctgtct 2220

gcgagggcca gctgttgggc tcgcggttga ggacaaactc ttcgcggtct ttccagtact 2280

cttggatcgg aaacccgtcg gcctccgaac ggtactccgc caccgaggga cctgagcgag 2340

tccgcatcga ccggatcgga aaacctctcg agaaaggcgt ctaaccagtc acagtcgcaa 2400

ggtaggctga gcaccgtggc gggcggcagc gggtggcggt cggggttgtt tctggcggag 2460

gtgctgctga tgatgtaatt aaagtaggcg gtcttgagac ggcggatggt cgaggtgagg 2520

tgtggcaggc ttgagatcca gctgttgggg tgagtactcc ctctcaaaag cgggcattac 2580

ttctgcgcta agattgtcag tttccaaaaa cgaggaggat ttgatattca cctggcccga 2640

tctggccata cacttgagtg acaatgacat ccactttgcc tttctctcca caggtgtcca 2700

ctcccaggtc caagtttaaa cgccgccacc 2730

<210> 669
<211> 3231
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 669
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcacctggag 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt catcatcgtt 420

tccttggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcggg ggaggctaac tgaaacacgg aaggagacaa taccggaagg 780

aacccgcgct atgacggcaa taaaaagaca gaataaaacg cacgggtgtt gggtcgtttg 840

ttcataaacg cggggttcgg tcccagggct ggcactctgt cgatacccca ccgagtcccc 900

attggggcca atacgcccgc gtttcttcct tttccccacc ccacccccca agttcgggtg 960

aaggcccagg gctcgcagcc aacgtcgggg cggcaggccc tgccatagaa atcgataata 1020

tatggtaggg ttcatagcca gagtaacctt ttttttaat ttttatttta ttttattttt 1080

gagtcgggcg cgccaaaatg aagtgaagtt cctatacttt ctagagcgag ctcacgggga 1140

cagccccccc ccaaagcccc cagggatgta attacgtccc tcccccgcta gggggcagca 1200

gcgagccgcc cggggctccg ctccggtccg gcgctccccc cgcatccccg agccggcagc 1260

gtgcggggac agcccgggca cggggaaggt ggcacgggat cgctttcctc tgaacgcttc 1320

tcgctgctct ttgagcctgc agacacctgg ggggatacgg ggaaaaagct ttaggctgaa 1380

agagagattt agaatgacag gcgagctcac ggggacagcc ccccccccaaa gcccccaggg 1440

atgtaattac gtccctcccc cgctaggggg cagcagcgag ccgcccgggg ctccgctccg 1500

gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg gggacagccc gggcacgggg 1560

aaggtggcac gggatcgctt tcctctgaac gcttctcgct gctctttgag cctgcagaca 1620

cctgggggga tacggggaaa aagcttgaaa cttgatctgt cgccgcaatt caagcttcgt 1680

gaggctccgg tgcccgtcag tgacctgcta tactctggag acgcctctcc cggccagagg 1740

agcaaggtat gcgggaggcg accaggagga tagcggggct gacgtcggga ggtggcctcc 1800

gtgggaagga cacccggatc ttgacacagc cttggcagcg gagtcaggaa gagtaggggt 1860

aggttctgga cgccctcttg gccagctcat cgccgcccca ccctctgctg gagcacagag 1920

taattcatac aaaaggaggg atcgccttcg caaggggaga gcccagggac cgtccctaaa 1980

ttctcacaga cccaaatccc tgtagccgcc ccacgacagc gcgaggagca tgcgcccagg 2040

gctgagcgcg ggtagatcag agcacacaag ctcacagtcc ccggcggtgg ggggaggggc 2100

gcgctgagcg ggggccaggg agctggcgcg gggcaaactg ggaaagtggt gtcgtgtgct 2160

ggctccgccc tcttcccgag ggtgggggag aacggtatat aagtgcggta gtcgccttgg 2220

acgttctttt tcgcaacggg tttgccgtca gaacgcaggt gagtggcggg tgtggcttcc 2280

gcgggccccg gagctggagc cctgctctga gcgggccggg ctgatatgcg agtgtcgtcc 2340

gcagggttta gctgtgagca ttcccacttc gagtggcggg cggtgcgggg gtgagagtgc 2400

gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct agcgtggtgt 2460

ccgccgccgc gtgccactcc ggccgcacta tgcgtttttt gtccttgctg ccctcgattg 2520

ccttccagca gcatgggcta acaaagggag ggtgtggggc tcactcttaa ggagcccatg 2580

aagcttacgt tggataggaa tggaagggca ggaggggcga ctggggcccg cccgccttcg 2640

gagcacatgt ccgacgccac ctggatgggg cgaggcctgt ggctttccga agcaatcggg 2700

cgtgagttta gcctacctgg gccatgtggc cctagcactg ggcacggtct ggcctggcgg 2760

tgccgcgttc ccttgcctcc caacaagggt gaggccgtcc cgcccggcac cagttgcttg 2820

cgcggaaaga tggccgctcc cggggccctg ttgcaaggag ctcaaaatgg aggacgcggc 2880

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctt gcccctcgcc 2940

ggccgctgct tcctgtgacc ccgtggtcta tcggccgcat agtcacctcg ggcttctctt 3000

gagcaccgct cgtcgcggcg gggggagggg atctaatggc gttggagttt gttcacattt 3060

ggtgggtgga gactagtcag gccagcctgg cgctggaagt cattcttgga atttgcccct 3120

ttgagtttgg agcgaggcta attctcaagc ctcttagcgg ttcaaaggta ttttctaaac 3180

ccgtttccag gtgttgtgaa agccaccgct aattcaaagc aagccgccac c 3231

<210> 670
<211> 2985
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 670
ccgcctagga caacctttag attataaaat ctgtgaaagg ttaacaggca ttctgaatta 60

tgttggtcct tttactaaat gtggttatgc tgctctcctt cctttgtatc aagctacttc 120

gcgtacggca tttgtgtttt cttctctcta ccacatctgg ttgctgtccc tttatgctga 180

gttgtggcct gttgccaggc aacgaggcgt ggtgtgctct gtgtctgacg caacccccctc 240

tggttggggc atttgcacca cctatcaact catttccccg acgggcgctt ttgccctgcc 300

gatcgccacc gcggacgtca tcgccgcatg ccttgcgcgc tgctggacag gcgctcggct 360

gttaggcact gacaactcgg tggttctttc gggcaaactg acttcctttc cttggctgct 420

cgcctctgtt gccaactgga ttcttcgcgg gacgtcgttc tgctacgtgc cttcggcagc 480

gaatccggcg gaccttcctt ctcgaggcct tctgccggct ctgcatcccg tgccgactct 540

ccgcttccgt ccgcagctga gtcgcatctc cctttggccc gcctccccga tattatccct 600

aatacttgcc accccactct taatcagtgg tggaagaacg gtgtcagaac tgtttgtttc 660

aattggccat ttaagtttag tagtaaaaga ctggttaatg ataacaatgc atcgtaaaac 720

cttcagaagg aaaggagaat gttttgtgga ccactttggt tttcttttt gcgtgtggca 780

gttttaagtt attagttttt aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 840

ttgtcacaga attttgagat ccattaaaaa agttaaatga gaaacctgtg tgttcctttg 900

gtcaacaccg agacatttag gtgaaagcat atactgagat tgagattaac ttcctgtgaa 960

acccagtgtc ttagacaact gtggcttgag caccacctgt tggtattcat tacaaacttg 1020

ctcactacaa taaatgaatt ttaagcttta agatgaagtg gcatttcttt taacagttac 1080

tatgttggaa ttggttacaa attttggagt ggactattgt atatatatat cagttactgt 1140

tatggatccc acgtcactat tgtatactct atattatact ctatgttata ctctgtaatc 1200

ctactcaata aacgtgtcac gcctgtgaaa ccgtactaag tctcccgtgt cttgttatca 1260

ccatcaggtg acatcctcgc ccaggctgtc aatcatgccg gtatcgattc cagtagcacc 1320

ggccccacgc tgacaaccca ctcttgcagc gttagcagcg cccctcttaa caagccgacc 1380

cccaccagcg tcgcggttac taacactcct ctccccgggg catccgctac tcccgagctc 1440

gaattcgttt atcggccacc gaggccaaga tctggccgcc atatactgag tcattaggga 1500

ctttccaatg ggttttgccc agtacataag gtcaataggg gtgaatcaac aggaaagtcc 1560

cattggagcc aagtacactg agtcaatagg gactttccat tgggttttgc ccagtacaaa 1620

aggtcaatag ggggtgagtc aatgggtttt tcccattatt ggcacgtaca taaggtcaat 1680

aggggtgagt cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat 1740

tgacgtcaat gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag 1800

ctgattaatg ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca 1860

gccaaaacgt aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat 1920

tggctgagct gcgttctacg tgggtataag aggcgcgacc agcgtcggta gggaccggtt 1980

tgccgccaga acacaggtga ggggcgggtg tggcttccgc gggccgccga gctggaggtc 2040

ctgctccgag cgggccgggc cccgctgtcg tcggcgggga ttagctgcga gcattcccgc 2100

ttcgagttgc gggcggcgcg ggaggcagag tgcgaggcct agcggcaacc ccgtagcctc 2160

gcctcgtgtc cggcttgagg cctagcgtgg tgtccgcgcc gccgccgcgt gctactccgg 2220

ccgcactctg gtctttttt tttttgttgt tgttgccctg ctgccttcga ttgccgttca 2280

gcaatagggg ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc ggagaggtca 2340

tggttgggga ggaatggagg gacaggagtg gcggctgggg cccgcccgcc ttcggagcac 2400

atgtccgacg ccacctggat ggggcgaggc ctggggtttt tcccgaagca accaggctgg 2460

ggttagcgtg ccgaggccat gtggccccag cacccggcac gatctggctt ggcggcgccg 2520

cgttgccctg cctccctaac tagggtgagg ccatcccgtc cggcaccagt tgcgtgcgtg 2580

gaaagatggc cgctcccggg ccctgttgca aggagctcaa aatggaggac gcggcagccc 2640

ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gcctggtccc tcaccggctg 2700

ctgcttcctg tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc ttttgagcac 2760

ggctagtcgc ggcgggggga ggggatgtaa tggcgttgga gtttgttcac atttggtggg 2820

tggagactag tcaggccagc ctggcgctgg aagtcatttt tggaatttgt ccccttgagt 2880

tttgagcgga gctaattctc gggcttctta gcggttcaaa ggtatctttt aaaccctttt 2940

ttaggtgttg tgaaaaccac cgctaattca aagcaagccg ccacc 2985

<210> 671
<211> 3083
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 671
ccgcctagga caacctttag attataaaat ctgtgaaagg ttaacaggca ttctgaatta 60

tgttggtcct tttactaaat gtggttatgc tgctctcctt cctttgtatc aagctacttc 120

gcgtacggca tttgtgtttt cttctctcta ccacatctgg ttgctgtccc tttatgctga 180

gttgtggcct gttgccaggc aacgaggcgt ggtgtgctct gtgtctgacg caacccccctc 240

tggttggggc atttgcacca cctatcaact catttccccg acgggcgctt ttgccctgcc 300

gatcgccacc gcggacgtca tcgccgcatg ccttgcgcgc tgctggacag gcgctcggct 360

gttaggcact gacaactcgg tggttctttc gggcaaactg acttcctttc cttggctgct 420

cgcctctgtt gccaactgga ttcttcgcgg gacgtcgttc tgctacgtgc cttcggcagc 480

gaatccggcg gaccttcctt ctcgaggcct tctgccggct ctgcatcccg tgccgactct 540

ccgcttccgt ccgcagctga gtcgcatctc cctttggccc gcctccccgg ggggaggcta 600

actgaaacac ggaaggagac aataccggaa ggaacccgcg ctatgacggc aataaaaaga 660

cagaataaaa cgcacgggtg ttgggtcgtt tgttcataaa cgcggggttc ggtcccaggg 720

ctggcactct gtcgataccc caccgagtcc ccattggggc caatacgccc gcgtttcttc 780

cttttcccca ccccaccccc caagttcggg tgaaggccca gggctcgcag ccaacgtcgg 840

ggcggcaggc cctgccatag aaatcgataa tatatggtag ggttcatagc cagagtaacc 900

ttttttttta atttttattt tattttattt ttgagtcggg cgcgccaaaa tgaagtgaag 960

ttcctatact ttctagagcg agctcacggg gacagccccc ccccaaagcc cccagggatg 1020

taattacgtc cctcccccgc taggggggcag cagcgagccg cccggggctc cgctccggtc 1080

cggcgctccc cccgcatccc cgagccggca gcgtgcgggg acagcccggg cacggggaag 1140

gtggcacggg atcgctttcc tctgaacgct tctcgctgct ctttgagcct gcagacacct 1200

gggggggatac ggggaaaaag ctttaggctg aaagagagat ttagaatgac aggcgagctc 1260

acggggacag ccccccccca aagcccccag ggatgtaatt acgtccctcc cccgctaggg 1320

ggcagcagcg agccgcccgg ggctccgctc cggtccggcg ctccccccgc atccccgagc 1380

cggcagcgtg cggggacagc ccgggcacgg ggaaggtggc acgggatcgc tttcctctga 1440

acgcttctcg ctgctctttg agcctgcaga cacctggggg gatacgggga aaaagcttga 1500

aacttgatct gtcgccgcaa ttcaagcttc gtgaggctcc ggtgcccgtc agtgacctgc 1560

tatactctgg agacgcctct cccggccaga ggagcaaggt atgcgggagg cgaccaggag 1620

gatagcgggg ctgacgtcgg gaggtggcct ccgtgggaag gacacccgga tcttgacaca 1680

gccttggcag cggagtcagg aagagtaggg gtaggttctg gacgccctct tggccagctc 1740

atcgccgccc caccctctgc tggagcacag agtaattcat acaaaaggag ggatcgcctt 1800

cgcaagggga gagcccaggg accgtcccta aattctcaca gacccaaatc cctgtagccg 1860

ccccacgaca gcgcgaggag catgcgccca gggctgagcg cgggtagatc agagcacaca 1920

agctcacagt ccccggcggt ggggggaggg gcgcgctgag cgggggccag ggagctggcg 1980

cggggcaaac tgggaaagtg gtgtcgtgtg ctggctccgc cctcttcccg agggtggggg 2040

agaacggtat ataagtgcgg tagtcgcctt ggacgttctt tttcgcaacg ggtttgccgt 2100

cagaacgcag gtgagtggcg ggtgtggctt ccgcgggccc cggagctgga gccctgctct 2160

gagcgggccg ggctgatatg cgagtgtcgt ccgcagggtt tagctgtgag cattcccact 2220

tcgagtggcg ggcggtgcgg gggtgagagt gcgaggccta gcggcaaccc cgtagcctcg 2280

cctcgtgtcc ggcttgaggc ctagcgtggt gtccgccgcc gcgtgccact ccggccgcac 2340

tatgcgtttt ttgtccttgc tgccctcgat tgccttccag cagcatgggc taacaaaggg 2400

agggtgtggg gctcactctt aaggagccca tgaagcttac gttggatagg aatggaaggg 2460

caggaggggc gactggggcc cgcccgcctt cggagcacat gtccgacgcc acctggatgg 2520

ggcgaggcct gtggctttcc gaagcaatcg ggcgtgagtt tagcctacct gggccatgtg 2580

gccctagcac tgggcacggt ctggcctggc ggtgccgcgt tcccttgcct cccaacaagg 2640

gtgaggccgt cccgcccggc accagttgct tgcgcggaaa gatggccgct cccggggccc 2700

tgttgcaagg agctcaaaat ggaggacgcg gcagcccggt ggagcgggcg ggtgagtcac 2760

ccacacaaag gaagagggcc ttgcccctcg ccggccgctg cttcctgtga ccccgtggtc 2820

tatcggccgc atagtcacct cgggcttctc ttgagcaccg ctcgtcgcgg cgggggggagg 2880

ggatctaatg gcgttggagt ttgttcacat ttggtgggtg gagactagtc aggccagcct 2940

ggcgctggaa gtcattcttg gaatttgccc ctttgagttt ggagcgaggc taattctcaa 3000

gcctcttagc ggttcaaagg tattttctaa acccgtttcc aggtgttgtg aaagccaccg 3060

ctaattcaaa gcaagccgcc acc 3083

<210> 672
<211> 3220
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 672
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcacctggag 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt catcatcgtt 420

tccttggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcata ttatccctaa tacttgccac cccactctta atcagtggtg 780

gaagaacggt gtcagaactg tttgtttcaa ttggccattt aagtttagta gtaaaagact 840

ggttaatgat aacaatgcat cgtaaaacct tcagaaggaa aggagaatgt tttgtggacc 900

actttggttt tctttttgc gtgtggcagt tttaagttat tagtttttaa aatcagtact 960

ttttaatgga aacaacttga ccaaaaattt gtcacagaat tttgagatcc attaaaaaag 1020

ttaaatgaga aacctgtgtg ttcctttggt caacaccgag acatttaggt gaaagcatat 1080

actgagattg agattaactt cctgtgaaac ccagtgtctt agacaactgt ggcttgagca 1140

ccacctgttg gtattcatta caaacttgct cactacaata aatgaatttt aagctttaag 1200

atgaagtggc atttctttta acagttacta tgttggaatt ggttacaaat tttggagtgg 1260

actattgtat atatatatca gttactgtta tggatcccac gtcactattg tatactctat 1320

attatactct atgttatact ctgtaatcct actcaataaa cgtgtcacgc ctgtgaaacc 1380

gtactaagtc tcccgtgtct tgttatcacc atcaggtgac atcctcgccc aggctgtcaa 1440

tcatgccggt atcgattcca gtagcaccgg ccccacgctg acaacccact cttgcagcgt 1500

tagcagcgcc cctcttaaca agccgacccc caccagcgtc gcggttacta acactcctct 1560

ccccggggca tccgctactc ccgagctcga attcgtttat cggccaccga ggccaagatc 1620

tggccgccaa cttacggtaa atggcccgcc tggctgaccg cccaacgacc cccgcccatt 1680

gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc attgacgtca 1740

atgggtggag tatttacggt aaactgccca cttggcagta catcaagtgt atcatatgcc 1800

aagtccgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt atgcccagta 1860

catgacctta cgggactttc ctacttggca gtacatctac gtattagtca tcgctattac 1920

caagtcattg ggtttttcca gccaatttat aaaacgccat gtactttccc accattgacg 1980

tcaatgggct attgaaacta atgcaacgtg acctttaaac ggtactttcc catagctgat 2040

taatgggaaa gtaccgttct cgagccaata cacgtcaatg ggaagtgaaa gggcagccaa 2100

aacgtaacac cgccccggtt ttcccctgga aattccatat tggcacgcat tctattggct 2160

gagctgcgtt ctacgtgggt ataagaggcg cgaccagcgt cggtagggac cggtttgccg 2220

ccagaacaca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg aggtcctgct 2280

ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt cccgcttcga 2340

gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta gcctcgcctc 2400

gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac tccggccgca 2460

ctctggtctt ttttttttt gttgttgttg ccctgctgcc ttcgattgcc gttcagcaat 2520

aggggctaac aaagggaggg tgcggggctt gctcgcccgg agcccggaga ggtcatggtt 2580

ggggaggaat ggagggacag gagtggcggc tggggcccgc ccgccttcgg agcacatgtc 2640

cgacgccacc tggatggggc gaggcctggg gtttttcccg aagcaaccag gctggggtta 2700

gcgtgccgag gccatgtggc cccagcaccc ggcacgatct ggcttggcgg cgccgcgttg 2760

ccctgcctcc ctaactaggg tgaggccatc ccgtccggca ccagttgcgt gcgtggaaag 2820

atggccgctc ccgggccctg ttgcaaggag ctcaaaatgg aggacgcggc agcccggtgg 2880

agcgggcggg tgagtcaccc acacaaagga agagggcctg gtccctcacc ggctgctgct 2940

tcctgtgacc ccgtggtcct atcggccgca atagtcacct cgggcttttg agcacggcta 3000

gtcgcggcgg ggggagggga tgtaatggcg ttggagtttg ttcacatttg gtgggtggag 3060

actagtcagg ccagcctggc gctggaagtc atttttggaa tttgtcccct tgagttttga 3120

gcggagctaa ttctcgggct tcttagcggt tcaaaggtat cttttaaacc ctttttttagg 3180

tgttgtgaaa accaccgcta attcaaagca agccgccacc 3220

<210> 673
<211> 3072
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 673
ccgcctagga caacctttag attataaaat ctgtgaaagg ttaacaggca ttctgaatta 60

tgttggtcct tttactaaat gtggttatgc tgctctcctt cctttgtatc aagctacttc 120

gcgtacggca tttgtgtttt cttctctcta ccacatctgg ttgctgtccc tttatgctga 180

gttgtggcct gttgccaggc aacgaggcgt ggtgtgctct gtgtctgacg caacccccctc 240

tggttggggc atttgcacca cctatcaact catttccccg acgggcgctt ttgccctgcc 300

gatcgccacc gcggacgtca tcgccgcatg ccttgcgcgc tgctggacag gcgctcggct 360

gttaggcact gacaactcgg tggttctttc gggcaaactg acttcctttc cttggctgct 420

cgcctctgtt gccaactgga ttcttcgcgg gacgtcgttc tgctacgtgc cttcggcagc 480

gaatccggcg gaccttcctt ctcgaggcct tctgccggct ctgcatcccg tgccgactct 540

ccgcttccgt ccgcagctga gtcgcatctc cctttggccc gcctccccga tattatccct 600

aatacttgcc accccactct taatcagtgg tggaagaacg gtgtcagaac tgtttgtttc 660

aattggccat ttaagtttag tagtaaaaga ctggttaatg ataacaatgc atcgtaaaac 720

cttcagaagg aaaggagaat gttttgtgga ccactttggt tttctttttt gcgtgtggca 780

gttttaagtt attagttttt aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 840

ttgtcacaga attttgagat ccattaaaaa agttaaatga gaaacctgtg tgttcctttg 900

gtcaacaccg agacatttag gtgaaagcat atactgagat tgagattaac ttcctgtgaa 960

acccagtgtc ttagacaact gtggcttgag caccacctgt tggtattcat tacaaacttg 1020

ctcactacaa taaatgaatt ttaagcttta agatgaagtg gcatttcttt taacagttac 1080

tatgttggaa ttggttacaa attttggagt ggactattgt atatatatat cagttactgt 1140

tatggatccc acgtcactat tgtatactct atattatact ctatgttata ctctgtaatc 1200

ctactcaata aacgtgtcac gcctgtgaaa ccgtactaag tctcccgtgt cttgttatca 1260

ccatcaggtg acatcctcgc ccaggctgtc aatcatgccg gtatcgattc cagtagcacc 1320

ggccccacgc tgacaaccca ctcttgcagc gttagcagcg cccctcttaa caagccgacc 1380

cccaccagcg tcgcggttac taacactcct ctccccgggg catccgctac tcccgagctc 1440

gaattcgttt atcggccacc gaggccaaga tctggccgcc aacttacggt aaatggcccg 1500

cctggctgac cgcccaacga cccccgccca ttgacgtcaa taatgacgta tgttcccata 1560

gtaacgccaa tagggacttt ccattgacgt caatgggtgg agtatttacg gtaaactgcc 1620

cacttggcag tacatcaagt gtatcatatg ccaagtccgc cccctattga cgtcaatgac 1680

ggtaaatggc ccgcctggca ttatgcccag tacatgacct tacgggactt tcctacttgg 1740

cagtacatct acgtattagt catcgctatt accaagtcat tgggtttttc cagccaattt 1800

ataaaacgcc atgtactttc ccaccattga cgtcaatggg ctattgaaac taatgcaacg 1860

tgacctttaa acggtacttt cccatagctg attaatggga aagtaccgtt ctcgagccaa 1920

tacacgtcaa tgggaagtga aagggcagcc aaaacgtaac accgccccgg ttttcccctg 1980

gaaattccat attggcacgc attctattgg ctgagctgcg ttctacgtgg gtataagagg 2040

cgcgaccagc gtcggtaggg accggtttgc cgccagaaca caggtgaggg gcgggtgtgg 2100

cttccgcggg ccgccgagct ggaggtcctg ctccgagcgg gccgggcccc gctgtcgtcg 2160

gcggggatta gctgcgagca ttcccgcttc gagttgcggg cggcgcggga ggcagagtgc 2220

gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct agcgtggtgt 2280

ccgcgccgcc gccgcgtgct actccggccg cactctggtc ttttttttttt ttgttgttgt 2340

tgccctgctg ccttcgattg ccgttcagca ataggggcta acaaagggag ggtgcggggc 2400

ttgctcgccc ggagcccgga gaggtcatgg ttggggagga atggagggac aggagtggcg 2460

gctggggccc gcccgccttc ggagcacatg tccgacgcca cctggatggg gcgaggcctg 2520

gggtttttcc cgaagcaacc aggctggggt tagcgtgccg aggccatgtg gccccagcac 2580

ccggcacgat ctggcttggc ggcgccgcgt tgccctgcct ccctaactag ggtgaggcca 2640

tcccgtccgg caccagttgc gtgcgtggaa agatggccgc tcccgggccc tgttgcaagg 2700

agctcaaaat ggaggacgcg gcagcccggt ggagcgggcg ggtgagtcac ccacacaaag 2760

gaagagggcc tggtccctca ccggctgctg cttcctgtga ccccgtggtc ctatcggccg 2820

caatagtcac ctcgggcttt tgagcacggc tagtcgcggc ggggggaggg gatgtaatgg 2880

cgttggagtt tgttcacatt tggtgggtgg agactagtca ggccagcctg gcgctggaag 2940

tcatttttgg aatttgtccc cttgagtttt gagcggagct aattctcggg cttcttagcg 3000

gttcaaaggt atcttttaaa ccctttttta ggtgttgtga aaaccaccgc taattcaaag 3060

caagccgcca cc 3072

<210> 674
<211> 2492
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 674
ccgcctagga caacctttag attataaaat ctgtgaaagg ttaacaggca ttctgaatta 60

tgttggtcct tttactaaat gtggttatgc tgctctcctt cctttgtatc aagctacttc 120

gcgtacggca tttgtgtttt cttctctcta ccacatctgg ttgctgtccc tttatgctga 180

gttgtggcct gttgccaggc aacgaggcgt ggtgtgctct gtgtctgacg caacccccctc 240

tggttggggc atttgcacca cctatcaact catttccccg acgggcgctt ttgccctgcc 300

gatcgccacc gcggacgtca tcgccgcatg ccttgcgcgc tgctggacag gcgctcggct 360

gttaggcact gacaactcgg tggttctttc gggcaaactg acttcctttc cttggctgct 420

cgcctctgtt gccaactgga ttcttcgcgg gacgtcgttc tgctacgtgc cttcggcagc 480

gaatccggcg gaccttcctt ctcgaggcct tctgccggct ctgcatcccg tgccgactct 540

ccgcttccgt ccgcagctga gtcgcatctc cctttggccc gcctccccgg ggggaggcta 600

actgaaacac ggaaggagac aataccggaa ggaacccgcg ctatgacggc aataaaaaga 660

cagaataaaa cgcacgggtg ttgggtcgtt tgttcataaa cgcggggttc ggtcccaggg 720

ctggcactct gtcgataccc caccgagtcc ccattggggc caatacgccc gcgtttcttc 780

ctttcccca ccccaccccc caagttcggg tgaaggccca gggctcgcag ccaacgtcgg 840

ggcggcaggc cctgccatag aaatcgataa tatatggtag ggttcatagc cagagtaacc 900

ttttttttta atttttattt tattttattt ttgagtcggg cgcgccaaaa tgaagtgaag 960

ttcctatact ttctagagcg agctcacggg gacagccccc ccccaaagcc cccagggatg 1020

taattacgtc cctcccccgc taggggggcag cagcgagccg cccggggctc cgctccggtc 1080

cggcgctccc cccgcatccc cgagccggca gcgtgcgggg acagcccggg cacggggaag 1140

gtggcacggg atcgctttcc tctgaacgct tctcgctgct ctttgagcct gcagacacct 1200

gggggggatac ggggaaaaag ctttaggctg aaagagagat ttagaatgac aggcgagctc 1260

acggggacag ccccccccca aagcccccag ggatgtaatt acgtccctcc cccgctaggg 1320

ggcagcagcg agccgcccgg ggctccgctc cggtccggcg ctccccccgc atccccgagc 1380

cggcagcgtg cggggacagc ccgggcacgg ggaaggtggc acgggatcgc tttcctctga 1440

acgcttctcg ctgctctttg agcctgcaga cacctggggg gatacgggga aaaagcttga 1500

aacttgatct gtcgccgcaa ttcaagcttc gtgaggctcc ggtgcccgtc agtgacctgc 1560

tatactctgg agacgactta cggtaaatgg cccgcctggc tgaccgccca acgacccccg 1620

cccattgacg tcaataatga cgtatgttcc catagtaacg ccaataggga ctttccattg 1680

acgtcaatgg gtggagtatt tacggtaaac tgcccacttg gcagtacatc aagtgtatca 1740

tatgccaagt ccgcccccta ttgacgtcaa tgacggtaaa tggcccgcct ggcattatgc 1800

ccagtacatg accttacggg actttcctac ttggcagtac atctacgtat tagtcatcgc 1860

tattaccatg ctgatgcggt tttggcagta caccaatggg cgtggatagc ggtttgactc 1920

acggggattt ccaagtctcc accccattga cgtcaatggg agtttgtttt ggcaccaaaa 1980

tcaacgggac tttccaaaat gtcgtaataa ccccgccccg ttgacgcaaa tgggcggtag 2040

gcgtgtacgg tgggaggtct atataagcag agctcgttta gtgaaccgtc agatcgcctg 2100

gagacgccat ccacgctgtt ttgacctcca tagaagatac cgggaccgat ccagcctccg 2160

cggccgggaa cggtgcattg gaacgcggat tccccgtgcc aagagtgacc ctggcagaac 2220

tcggtaagtc tgttgacatg tatgtgatgt atactaacct gcatgggacg tggatttact 2280

tgtgtatgtc agatagagta aagattaact cttgcatgtg agcggggcat cgagatagcg 2340

ataaatgagt caggaggacg gagcctctgc taaccatgtt catgccttct tctttttcct 2400

acagctcctg ggcaacgtgc tggttattgt gctgtctcat cattttggca aagaatttca 2460

ccgtccttga cacgaagttt gctcgagcca cc 2492

<210> 675
<211> 2464
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 675
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctataga caagcagggg atggcggggc tgacgtcggg aggtggcctc 1020

cacgggaagg gacacccgga tctcgacaca gccttggcag tggagtcagg aagggtagga 1080

cagattctgg acgccctctt ggccagtcct caccgcccca cccccgatgg agccgagagt 1140

aattcataca aaaggaggga tcgccttcgc ccctgggaat cccagggacc gtcgctaaat 1200

tctggccggc ctcccagccc ggaaccgctg tgcccgccca gcgcggcggg aggagcctgc 1260

gcctagggcg gatcgcgggt cggcgggaga gcacaagccc acagtccccg gcggtggggg 1320

aggggcgcgc tgagcggggg cccgggagcc agcgcggggc aaactgggaa agtggtgtcg 1380

tgtgctggct ccgccctctt cccgagggtg ggggagaacg gtataaaagt gcggtagtcg 1440

cgttggacgt tctttttcgc aacgggtttg ccgtcagaac gcaggtgagt ggcgggtgtg 1500

gcctccgcgg gcccgggctc cctcctttga gcggggtcgg accgccgtgc gggtgtcgtc 1560

ggccgggctt ctctgcgagc gttcccgccc tggatggcgg gctgtgcggg agggcgaggg 1620

ggggaggcct ggcggcggcc ccggagcctc gcctcgtgtc gggcgtgagg cctagcgtgg 1680

cttccgcccc gccgcgtgcc accgcggccg cgctttgctg tctgcccggc tgccctcgat 1740

tgcctgcccg cggcccgggc caacaaaggg agggcgtgga gctggctggt agggagcccc 1800

gtagtccgca tgtcgggcag ggagagcggc agcagtcggg ggggggaccg ggcccgcccg 1860

tcccgcagca catgtccgac gccgcctgga cgggtagcgg cctgtgtcct gataaggcgg 1920

ccgggcggtg ggttttagat gccgggttca ggtggccccg ggtcccggcc cggtctggcc 1980

agtaccccgt agtggcttag ctccgaggag ggcgagcccg cccgcccggc accagttgcg 2040

tgcgcggaaa gatggccgct cccgggccct gtagcaagga gctcaaaatg gaggacgcgg 2100

cagcccggcg gagcggggcg ggtgagtcac ccacacaaag gaagagggcc ttgcccctcg 2160

ccggccgctg cttcctgtga ccccgtggtg taccggccgc acttcagtca ccccgggcgc 2220

tctttcggag caccgctggc ctccgctggg ggaggggatc tgtctaatgg cgttggagtt 2280

tgctcacatt tggtgggtgg agactgtagc caggccagcc tggccatgga agtaattctt 2340

ggaatttgcc cattttgagt ttggagcgaa gctgattgac aaagctgctt agccgttcaa 2400

aggtattctt cgaacttttt ttttaaggtg ttgtgaaaac caccgctaat tcaaatccgc 2460

cacc 2464

<210> 676
<211> 3050
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 676
ccgcctagga caacctttag attataaaat ctgtgaaagg ttaacaggca ttctgaatta 60

tgttggtcct tttactaaat gtggttatgc tgctctcctt cctttgtatc aagctacttc 120

gcgtacggca tttgtgtttt cttctctcta ccacatctgg ttgctgtccc tttatgctga 180

gttgtggcct gttgccaggc aacgaggcgt ggtgtgctct gtgtctgacg caacccccctc 240

tggttggggc atttgcacca cctatcaact catttccccg acgggcgctt ttgccctgcc 300

gatcgccacc gcggacgtca tcgccgcatg ccttgcgcgc tgctggacag gcgctcggct 360

gttaggcact gacaactcgg tggttctttc gggcaaactg acttcctttc cttggctgct 420

cgcctctgtt gccaactgga ttcttcgcgg gacgtcgttc tgctacgtgc cttcggcagc 480

gaatccggcg gaccttcctt ctcgaggcct tctgccggct ctgcatcccg tgccgactct 540

ccgcttccgt ccgcagctga gtcgcatctc cctttggccc gcctccccgg ggggaggcta 600

actgaaacac ggaaggagac aataccggaa ggaacccgcg ctatgacggc aataaaaaga 660

cagaataaaa cgcacgggtg ttgggtcgtt tgttcataaa cgcggggttc ggtcccaggg 720

ctggcactct gtcgataccc caccgagtcc ccattggggc caatacgccc gcgtttcttc 780

cttttcccca ccccaccccc caagttcggg tgaaggccca gggctcgcag ccaacgtcgg 840

ggcggcaggc cctgccatag aaatcgataa tatatggtag ggttcatagc cagagtaacc 900

ttttttttta atttttattt tattttattt ttgagtcggg cgcgccaaaa tgaagtgaag 960

ttcctatact ttctagagcg agctcacggg gacagccccc ccccaaagcc cccagggatg 1020

taattacgtc cctcccccgc taggggggcag cagcgagccg cccggggctc cgctccggtc 1080

cggcgctccc cccgcatccc cgagccggca gcgtgcgggg acagcccggg cacggggaag 1140

gtggcacggg atcgctttcc tctgaacgct tctcgctgct ctttgagcct gcagacacct 1200

gggggggatac ggggaaaaag ctttaggctg aaagagagat ttagaatgac aggcgagctc 1260

acggggacag ccccccccca aagcccccag ggatgtaatt acgtccctcc cccgctaggg 1320

ggcagcagcg agccgcccgg ggctccgctc cggtccggcg ctccccccgc atccccgagc 1380

cggcagcgtg cggggacagc ccgggcacgg ggaaggtggc acgggatcgc tttcctctga 1440

acgcttctcg ctgctctttg agcctgcaga cacctggggg gatacgggga aaaagcttga 1500

aacttgatct gtcgccgcaa ttcaagcttc gtgaggctcc ggtgcccgtc agtgacctgc 1560

tatagacaag caggggatgg cggggctgac gtcgggaggt ggcctccacg ggaagggaca 1620

cccggatctc gacacagcct tggcagtgga gtcaggaagg gtaggacaga ttctggacgc 1680

cctcttggcc agtcctcacc gccccacccc cgatggagcc gagagtaatt catacaaaag 1740

gagggatcgc cttcgcccct gggaatccca gggaccgtcg ctaaattctg gccggcctcc 1800

cagcccggaa ccgctgtgcc cgcccagcgc ggcgggagga gcctgcgcct agggcggatc 1860

gcgggtcggc gggagagcac aagcccacag tccccggcgg tgggggaggg gcgcgctgag 1920

cgggggcccg ggagccagcg cggggcaaac tgggaaagtg gtgtcgtgtg ctggctccgc 1980

cctcttcccg agggtggggg agaacggtat aaaagtgcgg tagtcgcgtt ggacgttctt 2040

tttcgcaacg ggtttgccgt cagaacgcag gtgagtggcg ggtgtggcct ccgcgggccc 2100

gggctccctc ctttgagcgg ggtcggaccg ccgtgcgggt gtcgtcggcc gggcttctct 2160

gcgagcgttc ccgccctgga tggcgggctg tgcgggaggg cgagggggggg aggcctggcg 2220

gcggccccgg agcctcgcct cgtgtcgggc gtgaggccta gcgtggcttc cgccccgccg 2280

cgtgccaccg cggccgcgct ttgctgtctg cccggctgcc ctcgattgcc tgcccgcggc 2340

ccgggccaac aaagggaggg cgtggagctg gctggtaggg agccccgtag tccgcatgtc 2400

gggcagggag agcggcagca gtcgggggggg ggaccgggcc cgcccgtccc gcagcacatg 2460

tccgacgccg cctggacggg tagcggcctg tgtcctgata aggcggccgg gcggtgggtt 2520

ttagatgccg ggttcaggtg gccccgggtc ccggcccggt ctggccagta ccccgtagtg 2580

gcttagctcc gaggagggcg agcccgcccg cccggcacca gttgcgtgcg cggaaagatg 2640

gccgctcccg ggccctgtag caaggagctc aaaatggagg acgcggcagc ccggcggagc 2700

ggggcgggtg agtcacccac acaaaggaag agggccttgc ccctcgccgg ccgctgcttc 2760

ctgtgacccc gtggtgtacc ggccgcactt cagtcacccc gggcgctctt tcggagcacc 2820

gctggcctcc gctgggggag gggatctgtc taatggcgtt ggagtttgct cacatttggt 2880

gggtggagac tgtagccagg ccagcctggc catggaagta attcttggaa tttgcccatt 2940

ttgagtttgg agcgaagctg attgacaaag ctgcttagcc gttcaaaggt attcttcgaa 3000

ctttttttt aaggtgttgt gaaaaccacc gctaattcaa atccgccacc 3050

<210> 677
<211> 3198
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 677
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcacctggag 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt catcatcgtt 420

tccttggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcggg ggaggctaac tgaaacacgg aaggagacaa taccggaagg 780

aacccgcgct atgacggcaa taaaaagaca gaataaaacg cacgggtgtt gggtcgtttg 840

ttcataaacg cggggttcgg tcccagggct ggcactctgt cgatacccca ccgagtcccc 900

attggggcca atacgcccgc gtttcttcct tttccccacc ccacccccca agttcgggtg 960

aaggcccagg gctcgcagcc aacgtcgggg cggcaggccc tgccatagaa atcgataata 1020

tatggtaggg ttcatagcca gagtaacctt ttttttaat ttttatttta ttttattttt 1080

gagtcgggcg cgccaaaatg aagtgaagtt cctatacttt ctagagcgag ctcacgggga 1140

cagccccccc ccaaagcccc cagggatgta attacgtccc tcccccgcta gggggcagca 1200

gcgagccgcc cggggctccg ctccggtccg gcgctccccc cgcatccccg agccggcagc 1260

gtgcggggac agcccgggca cggggaaggt ggcacgggat cgctttcctc tgaacgcttc 1320

tcgctgctct ttgagcctgc agacacctgg ggggatacgg ggaaaaagct ttaggctgaa 1380

agagagattt agaatgacag gcgagctcac ggggacagcc ccccccccaaa gcccccaggg 1440

atgtaattac gtccctcccc cgctaggggg cagcagcgag ccgcccgggg ctccgctccg 1500

gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg gggacagccc gggcacgggg 1560

aaggtggcac gggatcgctt tcctctgaac gcttctcgct gctctttgag cctgcagaca 1620

cctgggggga tacggggaaa aagcttgaaa cttgatctgt cgccgcaatt caagcttcgt 1680

gaggctccgg tgcccgtcag tgacctgcta tagacaagca ggggatggcg gggctgacgt 1740

cgggaggtgg cctccacggg aagggacacc cggatctcga cacagccttg gcagtggagt 1800

caggaagggt aggacagatt ctggacgccc tcttggccag tcctcaccgc cccacccccg 1860

atggagccga gagtaattca tacaaaagga gggatcgcct tcgcccctgg gaatcccagg 1920

gaccgtcgct aaattctggc cggcctccca gcccggaacc gctgtgcccg cccagcgcgg 1980

cgggaggagc ctgcgcctag ggcggatcgc gggtcggcgg gagagcacaa gcccacagtc 2040

cccggcggtg ggggaggggc gcgctgagcg ggggcccggg agccagcgcg gggcaaactg 2100

ggaaagtggt gtcgtgtgct ggctccgccc tcttcccgag ggtgggggag aacggtataa 2160

aagtgcggta gtcgcgttgg acgttctttt tcgcaacggg tttgccgtca gaacgcaggt 2220

gagtggcggg tgtggcctcc gcgggcccgg gctccctcct ttgagcgggg tcggaccgcc 2280

gtgcgggtgt cgtcggccgg gcttctctgc gagcgttccc gccctggatg gcgggctgtg 2340

cgggagggcg agggggggag gcctggcggc ggccccggag cctcgcctcg tgtcgggcgt 2400

gaggcctagc gtggcttccg ccccgccgcg tgccaccgcg gccgcgcttt gctgtctgcc 2460

cggctgccct cgattgcctg cccgcggccc gggccaacaa agggagggcg tggagctggc 2520

tggtagggag ccccgtagtc cgcatgtcgg gcagggagag cggcagcagt cgggggggggg 2580

accgggcccg cccgtcccgc agcacatgtc cgacgccgcc tggacgggta gcggcctgtg 2640

tcctgataag gcggccgggc ggtgggtttt agatgccggg ttcaggtggc cccgggtccc 2700

ggcccggtct ggccagtacc ccgtagtggc ttagctccga ggagggcgag cccgcccgcc 2760

cggcaccagt tgcgtgcgcg gaaagatggc cgctcccggg ccctgtagca aggagctcaa 2820

aatggaggac gcggcagccc ggcggagcgg ggcgggtgag tcacccacac aaaggaagag 2880

ggccttgccc ctcgccggcc gctgcttcct gtgaccccgt ggtgtaccgg ccgcacttca 2940

gtcaccccgg gcgctctttc ggagcaccgc tggcctccgc tgggggaggg gatctgtcta 3000

atggcgttgg agtttgctca catttggtgg gtggagactg tagccaggcc agcctggcca 3060

tggaagtaat tcttggaatt tgcccatttt gagtttggag cgaagctgat tgacaaagct 3120

gcttagccgt tcaaaggtat tcttcgaact ttttttttaa ggtgttgtga aaaccaccgc 3180

taattcaaat ccgccacc 3198

<210> 678
<211> 2165
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 678
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaacg gtccgaattt caaagtcttt ttcctattga 780

cctacaaggt tttcaagaat catgttgtaa gcaactgtgt tctgaggaat ctatgtttaa 840

aaacccatcc gtggatcttg gcccagggtc cagagactga gctagccacg ccccggccgc 900

gccgcagcca ctcccacggc agttcaagtg ttaagtccca aagaccgcgc tctgtgcatg 960

cgcagacccg tccacagctg gctcctagcc aacccggccg gacgagcacc cggcgccgtc 1020

acgtgacgca cccaaccggc gtcgacctat aaaaggccgg gcgttgacgt cagcgttctc 1080

ttccgccgca gccgccgcca tcgtcggcgc gcttccctgt tcacctctga ctctgagaat 1140

ccgtcgccat ccgccaggtg agtctcctcg gctccgctag actcggggac cgagaggaat 1200

ctctggggca gcgggacgtg gctgtagcgg gacgctgaga gggacgggag gaagagacat 1260

ggctgccctg gcccgggcgg caggacgtgg tcgggccgcg gcgccatatc tgcgcgtccc 1320

tgagggcctt gggagtgtca actgccgagg tcggggtgtt ttcttgaagt ccttcaactc 1380

cccgcggccg ccggggtgac tgcgggaggg gttgtgcttg gtgatgtggc agcgggcaaa 1440

gcgccgtccc cgcgcccctg gtgacgggcg gagggtgtcc tcgggaggtg acagcctgta 1500

gggctggctt ccttggacac ctccagtggg ctgaacgcct tccgggccct ttccggtagc 1560

ccccgtgtct gttttctatc tgagttcaca cgtgagcacc ggtccccata atctaagaaa 1620

gtggctcact gggcctagtg gcgcattgtg gcctttgatc cgggctttga ccttggcgca 1680

cagcacccag tggtttgggg aagaggtgtg tgtagcagag gaggtttttt cgtgctttgg 1740

tcccaatcaa tccggcatct ttgcagtgcc gaggtggccg tgcaccttgg ctttgaattc 1800

ttgtgctgag gttatgtgac ttgagcctca agatagggtg ttctagcaca ggcttgctct 1860

taagtgtcgc agttgtcggt ttcggcgttt gtttagagct gtggacacat ctgtgaactt 1920

ttgatgctta tttcagaggt cctgggttgt acgtttgagt cacactgtga gctcagctcc 1980

aatcttgggc cgacatctgg ttcctgcccc tgctgtgggg tgctattgac ccaccgatgc 2040

ctgccaagtt gggttcccag aatcagcctg gctgcccatc cccccaccac aggtgaactt 2100

cgtctcaagc ttccttcttc tttttcctag aagctcagaa taaacgctca actttggccg 2160

ccacc 2165

<210> 679
<211> 2188
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 679
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaggatccaa cttctaagtc cgtttttttat tgatctaaaa 720

ggccttttgc gaatcatctt gaaggcaatc gcgttctgag ccacctcagc tttggcacac 780

agcgcgggga ctgtcgcgag gggtttaggg cccaagcagg acacaccccg aaatctccgc 840

agccaccccc accccacgcc cccggctctt gagggttaaa tcgcaggcgc tggttctcgc 900

acgcgcacat catcccgcag gcgagcccca gcacccagcc cagggtgcgc gcgcgccgtc 960

acgtgacacg cccaaccggc gtcgccgtat aaaagcgcgg gcgttgacgt cagcgttctc 1020

ttccgccgca gccgccgcca tcgtcggcgc ccctcgcact tctcctgtgc ccgtgagaat 1080

ccgtcgccat ccgccaggtg agtgaccccg gagcggcggt gctcggggcc ggagtcggta 1140

cctcggggct gcgggacgtg tcggtggcgg tccgcggagg ccggcctggg aggagacatg 1200

gctgccgggg cggcgggacg tggacggacg gggcggctgg cgccatgtct gcgcgtcggg 1260

ctgtggcctc ggcacggcgg ccgttgtccc ctcggcggac ggtgctgatt tggcagtggg 1320

cacagccagg cctctggccg ccctcgggcg tgggatcgct ggtcccgtcc ccggcggagg 1380

gccagcgtcc ctttacgagg tgacagccgg gtgggcggac ttccgtttgc acatccgcgt 1440

cccctgtggc cggcctccgc gcgtcacgtc gctgctgtag gacccccctcc tgaacggtga 1500

cgtgctccct gctaaccaaa tggattccga aggtagcctg ggcaagggct ctcgcatccc 1560

gccatgtgga acccgctggc tttgggtggc gcaaagcgtg tcccatgccg agcgtctgga 1620

ggttctgtgc ctccacacgt gtggacccat cgagttgtca tgagtagtgt cctgctgagg 1680

ttcccacgca cttctaggca ctgcttgctt ggctgtgaag ctggggtggc aggcgcagtt 1740

ttgttgcctg tggatgcgtt ggaagattgg gggcctttgg ttattgcggt ggtgactgtc 1800

tttgagatag ggtttcacgt agcccaggct tgctcaggtg gttagttcag ggtttgttta 1860

gttagggctg gacttctgac gtgctggctg tggactcttg atctgtatgc taacgaggtg 1920

cttgggcttg caggctcgag tcaccgcgga ctcactgttc cttatgaatg acaaccgagg 1980

ctccatcttg ggctgacggt cgtggttgta gtggctgtgt gcgcactgga gtgttgtgtg 2040

ggcaggccac ggccacgcgt gggaaacgac atgctgctgc ctgcagtttg ctcagctgcc 2100

cctcccccat cccaggtgaa cttcgtctca agcttccttc ttctttttcc tagaagctca 2160

gaataaacgc tcaactttgg ccgccacc 2188

<210> 680
<211> 1695
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 680
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaaaatcgat aatatatggt agggttcata gccagagtaa 720

cctttttttt taatttttat tttattttat ttttgagtcg ggcgcgccaa aatgaagtga 780

agttcctata ctttctagac gaagaacaac gaggagaaga tcctcaactt ttccgcagcc 840

ttttcaataa tggggagagg ttcgatgatg cagtggcagg gtgacccaca cttctccatt 900

tcccctgttc tcccatttta ctcgggaagc agcattcagg tttctgggtc ctggatgtcc 960

ttggtgcaca ctccaaggac tcctcgtcct taagttcata gtctgtattc cctgagtcct 1020

atcctgggaa ccatcacccg gtcacctcct gagcggggca atctcagctc ccctcccccct 1080

atcagttcgg agcccacacg cttggtgcgt gcacatttca aaaatgaggc gggtccaaag 1140

agagggagga ggggaaatga gagaggccca gctactcgcg gctttacggg tgcacgtagc 1200

tcaggcctct gcgcccttga gctaggactg gataagcagg gcgggaggcg gggcgcgcgt 1260

catcagctcc cccccaccat ccgggttcct ataaatacgg actgcagccc tccctggtgc 1320

tctctgctcc tccctgttcc agagtcggcc gcatcttctt gtgcagtgcc aggtgaaaat 1380

cgcggagtgg gccgcaggag gccggggaca gtcggaaact gggaagggga gtgggcactg 1440

tacgggtcta gggatgctgg tgcgaagtgt gcaagccgga cccaggctcc gcattgcagg 1500

gggggggatga tggaggacgt gatggggcgc acggcgggaa tggaggcggg gtgggggagg 1560

ggactgcctg gtgtccttcg ggccacgcta atctcatttt cttctcctgc agcctcgtcc 1620

cgtagacaaa cgtctcaagc ttccttcttc tttttcctag aagctcagaa taaacgctca 1680

actttggccg ccacc 1695

<210> 681
<211> 1396
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 681
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaaaa atcgataata tatggtaggg ttcatagcca 780

gagtaacctt ttttttaat ttttatttta ttttattttt gagtcgggcg cgccaaaatg 840

aagtgaagtt cctatacttt ctagacgggg ttggggttgc gccttttcca aggcagccct 900

gggtttgcgc agggacgcgg ctgctctggg cgtggttccg ggaaacgcag cggcgccgac 960

cctgggcctc gcacattctt cacgtccgtt cgcagcgtca cccggatctt cgccgctacc 1020

cttgtgggcc ccccggcgac gcttcctcgt ccgcccctaa gtcgggaagg ttccttgcgg 1080

ttcgcggcgt gccggacgtg acaaacggaa gccgcacgac tcactagtac cctcgcagac 1140

ggacagcgcc agggagcaat ggcagcgcgc cgaccgcgat gggctgtggc caatagcggc 1200

tgctcagcag ggcgcgccga gagcagcggc cgggaagggg cggtgcggga ggcggggtgt 1260

ggggcggtag tgtgggccct gttcctgccc gcgcggtgtt ccgcattctg caagcctccg 1320

gagcgcacgt ccgtctcaag cttccttctt ctttttccta gaagctcaga ataaacgctc 1380

aactttggcc gccacc 1396

<210> 682
<211> 2304
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 682
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaagt taaatgagaa acctgtgtgt tcctttgggg 780

cggggctgac gtcgggaggt ggcctccacg ggaagggaca cccggatctc gacacagcct 840

tggcagtgga gtcaggaagg gtaggacaga ttctggacgc cctcttggcc agtcctcacc 900

gccccacccc cgatggagcc gagagtaatt catacaaaag gagggatcgc cttcgccccc 960

gggaatccca gggaccgtcg ctaaattctg gccggcctcc cagcccggaa ccgctgtgcc 1020

cgcccagcgc ggcgggagga gcctgcgcct agggcggatc gcgggtcggc gggagagcac 1080

aagcccacag tccccggcgg tgggggaggg gcgcgctgag cgggggcccg ggagccagcg 1140

cggggcaaac tgggaaagtg gtgtcgtgtg ctggctccgc cctcttcccg agggtggggg 1200

agaacggtat aaaagtgcgg tagtcgcgtt ggacgttctt tttcgcaacg ggtttgccgt 1260

cagaacgcag gtgagtggcg ggtgtggcct ccgcgggccc gggctccctc ctttgagcgg 1320

ggtcggaccg ccgtgcgggt gtcgtcggcc gggcttctct gcgagcgttc ccgccctgga 1380

tggcgggctg tgcgggaggg cgagggggggg aggcctggcg gcggccccgg agcctcgcct 1440

cgtgtcgggc gtgaggccta gcgtggcttc cgccccgccg cgtgccaccg cggccgcgct 1500

ttgctgtctg cccggctgcc ctcgattgcc tgcccgcggc ccgggccaac aaagggaggg 1560

cgtggagctg gctggtaggg agccccgtag tccgcatgtc gggcagggag agcggcagca 1620

gtcgggggggg ggaccgggcc cgcccgtccc gcagcacatg tccgacgccg cctggacggg 1680

tagcggcctg tgtcctgata aggcggccgg gcggtgggtt ttagatgccg ggttcaggtg 1740

gccccgggtc ccggcccggt ctggccagta ccccgtagtg gcttagctcc gaggagggcg 1800

agcccgcccg cccggcacca gttgcgtgcg cggaaagatg gccgctcccg ggccctgtag 1860

caaggagctc aaaatggagg acgcggcagc ccggcggagc ggggcgggtg agtcacccac 1920

acaaaggaag agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtgtacc 1980

ggccgcactt cagtcacccc gggcgctctt tcggagcacc gctggcctcc gctgggggag 2040

gggatctgtc taatggcgtt ggagtttgct cacatttggt gggtggagac tgtagccagg 2100

ccagcctggc catggaagta attcttggaa tttgcccatt ttgagtttgg agcgaagctg 2160

attgacaaag ctgcttagcc gttcaaaggt attcttcgaa ctttttttt aaggtgttgt 2220

gaaaaccacc gctaattcaa atccaacagc ttgcttgttc tttttgcaga agctcagaat 2280

aaacgctcaa ctttggccgc cacc 2304

<210> 683
<211> 2190
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 683
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca tagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aacctctccc ggccagagga gcaaggtatg cgggaggcga 720

ccaggaggat agcggggctg acgtcgggag gtggcctccg tgggaaggac acccggatct 780

tgacacagcc ttggcagcgg agtcaggaag agtaggggta ggttctggac gccctcttgg 840

ccagctcatc gccgccccac cctctgctgg agcacagagt aattcataca aaaggaggga 900

tcgccttcgc aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct 960

gtagccgccc cacgacagcg cgaggagcat gcgcccaggg ctgagcgcgg gtagatcaga 1020

gcacacaagc tcacagtccc cggcggtggg gggaggggcg cgctgagcgg gggccaggga 1080

gctggcgcgg ggcaaactgg gaaagtggtg tcgtgtgctg gctccgccct cttcccgagg 1140

gtgggggaga acggtatata agtgcggtag tcgccttgga cgttcttttt cgcaacgggt 1200

ttgccgtcag aacgcaggtg agtggcgggt gtggcttccg cgggccccgg agctggagcc 1260

ctgctctgag cgggccgggc tgatatgcga gtgtcgtccg cagggtttag ctgtgagcat 1320

tcccacttcg agtggcgggc ggtgcggggg tgagagtgcg aggcctagcg gcaaccccgt 1380

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgccgccgcg tgccactccg 1440

gccgcactat gcgtttttg tccttgctgc cctcgattgc cttccagcag catgggctaa 1500

caaagggagg gtgtggggct cactcttaag gagcccatga agcttacgtt ggataggaat 1560

ggaagggcag gaggggcgac tggggcccgc ccgccttcgg agcacatgtc cgacgccacc 1620

tggatggggc gaggcctgtg gctttccgaa gcaatcgggc gtgagtttag cctacctggg 1680

ccatgtggcc ctagcactgg gcacggtctg gcctggcggt gccgcgttcc cttgcctccc 1740

aacaagggtg aggccgtccc gcccggcacc agttgcttgc gcggaaagat ggccgctccc 1800

ggggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt 1860

gagtcaccca cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc 1920

cgtggtctat cggccgcata gtcacctcgg gcttctcttg agcaccgctc gtcgcggcgg 1980

ggggagggga tctaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg 2040

ccagcctggc gctggaagtc attcttggaa tttgcccctt tgagtttgga gcgaggctaa 2100

ttctcaagcc tcttagcggt tcaaaggtat tttctaaacc cgtttccagg tgttgtgaaa 2160

gccaccgcta attcaaagca agccgccacc 2190

<210> 684
<211> 1750
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 684
cttgctcacc tcgagtacga tagccggcta atcagccata ccacatttgt agaggtttta 60

cttgctttaa aaaacctccc acacctcccc ctgaacctga aacataaaat gaatgcaatt 120

gttgttgtta acttgtttat tgcagcttat aatggttaca ataaagcaa tagcatcaca 180

aatttcacaa ataaagcatt tttttcactg cattctagtt gtggtttgtc caaactcatc 240

aatgtatctt atcatgtctg gtattcggac ggtgacgata tttgaaaata tggcatattg 300

aaaatgtcgc cgatgtgagt ttctgtgtaa ctgatatcgc catttttcca aaagtgattt 360

ttgggcatac gcgatatctg gcgatagcgc ttatatcgtt tacgggggat ggcgatagac 420

gactttggtg acttgggcga ttctgtgtgt cgcaaatatc gcagtttcga tataggtgac 480

agacgatatg aggctatatc gccgatagag gcgacatcaa gctggcacat ggccaatgca 540

tatcgatcta tacattgaat caatattggc cattagccat attattcatt ggttatatag 600

cataaatcaa tattggctat tggccattgc atacgttgta tccatatcat aatatgtaca 660

tttatattgg ctcatgtcca acattaccgc catgttgaca ttgattattg actagttatt 720

aatagtaatc aattacgggg tcattagttc atagcccata tatggagttc cgcgttacat 780

aacttacggt aaatggcccg cctggctgac cgcccaacga cccccgccca ttgacgtcaa 840

taatgacgta tgttcccata gtaacgccaa tagggacttt ccattgacgt caatgggtgg 900

agtatttacg gtaaactgcc cacttggcag tacatcaagt gtatcatatg ccaagtacgc 960

cccctattga cgtcaatgac ggtaaatggc ccgcctggca ttatgcccag tacatgacct 1020

tatgggactt tcctacttgg cagtacatct acgtattagt catcgctatt accatggtga 1080

tgcggttttg gcagtacatc aatgggcgtg gatagcggtt tgactcacgg ggatttccaa 1140

gtctccaccc cattgacgtc aatgggagtt tgttttggca ccaaaatcaa cgggactttc 1200

caaaatgtcg taacaactcc gccccattga cgcaaatggg cggtaggcgt gtacggtggg 1260

aggtctatat aagcagagct cgtttagtga accgtcagat cgcctggaga cgccatccac 1320

gctgttttga cctccataga agataccggg accgatccag cctccgcggc cgggaacggt 1380

gcattggaac gcggattccc cgtgccaaga gtgaccctgg cagaactcgg taagtctgtt 1440

gacatgtatg tgatgtatac taacctgcat gggacgtgga tttacttgtg tatgtcagat 1500

agagtaaaga ttaactcttg catgtgagcg gggcatcgag atagcgataa atgagtcagg 1560

aggacggagc ctctgctaac catgttcatg ccttcttctt tttcctacag ctcctgggca 1620

acgtgctggt tattgtgctg tctcatcatt ttggcaaaga atttcaccgt ccttgacacg 1680

aagtttgctc gaagcttcct tcttcttttt cctagaagct cagaataaac gctcaacttt 1740

ggccgccacc 1750

<210> 685
<211> 1852
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 685
cttgctcacc tcgagtacga tagccggcta atcagccatg gctaataaag gaaatttatt 60

ttcattgcaa tagtgtgttg gaatttttg tgtctctcac tcggaaggac atatgggagg 120

gcaaatcatt taaaacatca gaatgagtat ttggtttaga gtttggcaac atatgcccat 180

atgctggctg ccatgaacaa aggttggcta taaagaggtc atcagtatat gaaacagccc 240

cctgctgtcc attccttatt ccatagaaaa gccttgactt gaggttagat ttttttttata 300

ttttgttttg tgttattttt ttctttaaca tccctaaaat tttccttaca tgttttacta 360

gccagatttt tcctcctctc ctgactactc ccagtcatag ctgtccctct tctcttatgg 420

agatctattc ggacggtgac gatatttgaa aatatggcat attgaaaatg tcgccgatgt 480

gagtttctgt gtaactgata tcgccatttt tccaaaagtg atttttgggc atacgcgata 540

tctggcgata gcgcttatat cgtttacggg ggatggcgat agacgacttt ggtgacttgg 600

gcgattctgt gtgtcgcaaa tatcgcagtt tcgatatagg tgacagacga tatgaggcta 660

tatcgccgat agaggcgaca tcaagctggc acatggccaa tgcatatcga tctatacatt 720

gaatcaatat tggccattag ccatattatt cattggttat atagcataaa tcaatattgg 780

ctattggcca ttgcatacgt tgtatccata tcataatatg tacatttata ttggctcatg 840

tccaacatta ccgccatgtt gacattgatt attgactagt tattaatagt aatcaattac 900

ggggtcatta gttcatagcc catatatgga gttccgcgtt acataactta cggtaaatgg 960

cccgcctggc tgaccgccca acgacccccg cccattgacg tcaataatga cgtatgttcc 1020

catagtaacg ccaataggga ctttccattg acgtcaatgg gtggagtatt tacggtaaac 1080

tgcccacttg gcagtacatc aagtgtatca tatgccaagt acgccccta ttgacgtcaa 1140

tgacggtaaa tggcccgcct ggcattatgc ccagtacatg accttatggg actttcctac 1200

ttggcagtac atctacgtat tagtcatcgc tattaccatg gtgatgcggt tttggcagta 1260

catcaatggg cgtggatagc ggtttgactc acggggattt ccaagtctcc accccattga 1320

cgtcaatggg agtttgtttt ggcaccaaaa tcaacgggac tttccaaaat gtcgtaacaa 1380

ctccgcccca ttgacgcaaa tgggcggtag gcgtgtacgg tgggaggtct atataagcag 1440

agctcgttta gtgaaccgtc agatcgcctg gagacgccat ccacgctgtt ttgacctcca 1500

tagaagatac cgggaccgat ccagcctccg cggccgggaa cggtgcattg gaacgcggat 1560

tccccgtgcc aagagtgacc ctggcagaac tcggtaagtc tgttgacatg tatgtgatgt 1620

atactaacct gcatgggacg tggatttact tgtgtatgtc agatagagta aagattaact 1680

cttgcatgtg agcggggcat cgagatagcg ataaatgagt caggaggacg gagcctctgc 1740

taaccatgtt catgccttct tctttttcct acagctcctg ggcaacgtgc tggtagcttc 1800

cttcttcttt ttcctagaag ctcagaataa acgctcaact ttggccgcca cc 1852

<210> 686
<211> 1860
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 686
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaattcgt ttatcggcca ccgaggccaa gatctggccg 720

ccaattgatt attgactagt tattaatagt aatcaattac ggggtcatta gttcatagcc 780

catatatgga gttccgcgtt acataactta cggtaaatgg cccgcctggc tgaccgccca 840

acgacccccg cccattgacg tcaataatga cgtatgttcc catagtaacg ccaataggga 900

ctttccattg acgtcaatgg gtggagtatt tacggtaaac tgcccacttg gcagtacatc 960

aagtgtatca tatgccaagt ccgcccccta ttgacgtcaa tgacggtaaa tggcccgcct 1020

ggcattatgc ccagtacatg accttacggg actttcctac ttggcagtac atctacgtat 1080

tagtcatcgc tattaccatg gtgatgcggt tttggcagta caccaatggg cgtggatagc 1140

ggtttgactc acggggattt ccaagtctcc accccattga cgtcaatggg agtttgtttt 1200

ggcaccaaaa tcaacgggac tttccaaaat gtcgtaataa ccccgccccg ttgacgcaaa 1260

tgggcggtag gcgtgtacgg tgggaggtct atataagcag agctcgttta gtgaaccgtc 1320

agatcctcac tctcttccgc atcgctgtct gcgagggcca gctgttgggc tcgcggttga 1380

ggacaaactc ttcgcggtct ttccagtact cttggatcgg aaacccgtcg gcctccgaac 1440

ggtactccgc caccgaggga cctgagcgag tccgcatcga ccggatcgga aaacctctcg 1500

agaaaggcgt ctaaccagtc acagtcgcaa ggtaggctga gcaccgtggc gggcggcagc 1560

gggtggcggt cggggttgtt tctggcggag gtgctgctga tgatgtaatt aaagtaggcg 1620

gtcttgagac ggcggatggt cgaggtgagg tgtggcaggc ttgagatcca gctgttgggg 1680

tgagtactcc ctctcaaaag cgggcattac ttctgcgcta agattgtcag tttccaaaaa 1740

cgaggaggat ttgatattca cctggcccga tctggccata cacttgagtg acaatgacat 1800

ccactttgcc tttctctcca caggtgtcca ctcccaggtc caagtttaaa cgccgccacc 1860

<210> 687
<211> 1692
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 687
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaaga acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag atttttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatcata ttacccctaa cacctgccac cccagtctta 420

atcagtggtg gaagaactct cagaactgtt tgtctcaatt ggccatttaa gtttaatagt 480

gaaagactgg ttaatgataa caatgcatcg gaaaaccttc aggaggaaag gagaatgttt 540

tgtggaacat ttttgtgtgt gtggcagttt taagttatta gttttcaaaa tcagtacttt 600

ttaatggaaa caacttgacc aaaaatctgt cacagaattt tgaacccatt aaaaaaatcg 660

ataatatatg gtagggttca tagccagagt aacctttttt tttaattttt attttatttt 720

attttgagt cgggcgcgcc aaaatgaagt gaagttccta tactttctag aattgattat 780

tgactagtta ttaatagtaa tcaattacgg ggtcattagt tcatagccca tatatggagt 840

tccgcgttac ataacttacg gtaaatggcc cgcctggctg accgcccaac gacccccgcc 900

cattgacgtc aataatgacg tatgttccca tagtaacgcc aatagggact ttccattgac 960

gtcaatgggt ggagtattta cggtaaactg cccacttggc agtacatcaa gtgtatcata 1020

tgccaagtac gccccctatt gacgtcaatg acggtaaatg gcccgcctgg cattatgccc 1080

agtacatgac cttatgggac tttcctactt ggcagtacat ctacgtatta gtcatcgcta 1140

ttaccatggt gatgcggttt tggcagtaca tcaatgggcg tggatagcgg tttgactcac 1200

ggggatttcc aagtctccac cccattgacg tcaatgggag tttgttttgg caccaaaatc 1260

aacgggactt tccaaaatgt cgtaacaact ccgccccatt gacgcaaatg ggcggtaggc 1320

gtgtacggtg ggaggtctat ataagcagag ctcgtttagt gaaccgtcag atcgcctgga 1380

gaggccatcc acgctgtttt gacctccata gtggacaccg ggaccgatcc agcctccgcg 1440

gccgggaacg gtgcattgga acgcggattc cccgtgccaa gagtgacgta agtaccgcct 1500

atagagtcta taggcccacc cccttggctt cttatgcgta agtttctgtt tccatttcct 1560

ctcttgtgac acatttcatg actctgcatt tacataaccc ctgactcatg gtcttcccac 1620

tcttgttctc tcagagcttc cttcttcttt ttcctagaag ctcagaataa acgctcaact 1680

ttggccgcca cc 1692

<210> 688
<211> 1790
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 688
cttgctcacc tcgagtacga tagccggcta atcagccatg gctaataaag gaaatttatt 60

ttcattgcaa tagtgtgttg gaatttttg tgtctctcac tcggaaggac atatgggagg 120

gcaaatcatt taaaacatca gaatgagtat ttggtttaga gtttggcaac atatgcccat 180

atgctggctg ccatgaacaa aggttggcta taaagaggtc atcagtatat gaaacagccc 240

cctgctgtcc attccttatt ccatagaaaa gccttgactt gaggttagat ttttttata 300

ttttgttttg tgttattttt ttctttaaca tccctaaaat tttccttaca tgttttacta 360

gccagatttt tcctcctctc ctgactactc ccagtcatag ctgtccctct tctcttatgg 420

agatctattc ggacggtgac gatatttgaa aatatggcat attgaaaatg tcgccgatgt 480

gagtttctgt gtaactgata tcgccatttt tccaaaagtg atttttgggc atacgcgata 540

tctggcgata gcgcttatat cgtttacggg ggatggcgat agacgacttt ggtgacttgg 600

gcgattctgt gtgtcgcaaa tatcgcagtt tcgatatagg tgacagacga tatgaggcta 660

tatcgccgat agaggcgaca tcaagctggc acatggccaa tgcatatcga tctatacatt 720

gaatcaatat tggccattag ccatattatt cattggttat atagcataaa tcaatattgg 780

ctattggcca ttgcatacgt tgtatccata tcataatatg tacatttata ttggctcatg 840

tccaacatta ccgccatgtt gacgccaaga tctggccgcc atatactgag tcattaggga 900

ctttccaatg ggttttgccc agtacataag gtcaataggg gtgaatcaac aggaaagtcc 960

cattggagcc aagtacactg agtcaatagg gactttccat tgggttttgc ccagtacaaa 1020

aggtcaatag ggggtgagtc aatgggtttt tcccattatt ggcacgtaca taaggtcaat 1080

aggggtgagt cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat 1140

tgacgtcaat gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag 1200

ctgattaatg ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca 1260

gccaaaacgt aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat 1320

tggctgagct gcgttctacg tgggtataag aggcgcgacc agcgtcggta gggaccggtt 1380

tgccgccaga acacagtcag atcgcctgga gacgccatcc acgctgtttt gacctccata 1440

gaagataccg ggaccgatcc agcctccgcg gccgggaacg gtgcattgga acgcggattc 1500

cccgtgccaa gagtgaccct ggcagaactc ggtaagtctg ttgacatgta tgtgatgtat 1560

actaacctgc atgggacgtg gatttacttg tgtatgtcag atagagtaaa gattaactct 1620

tgcatgtgag cggggcatcg agatagcgat aaatgagtca ggaggacgga gcctctgcta 1680

accatgttca tgccttcttc tttttcctac agctcctggg caacgtgctg gtagcttcct 1740

tcttcttttt cctagaagct cagaataaac gctcaacttt ggccgccacc 1790

<210> 689
<211> 1798
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 689
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaattcgt ttatcggcca ccgaggccaa gatctggccg 720

ccagccaaga tctggccgcc atatactgag tcattaggga ctttccaatg ggttttgccc 780

agtacataag gtcaataggg gtgaatcaac aggaaagtcc cattggagcc aagtacactg 840

agtcaatagg gactttccat tgggttttgc ccagtacaaa aggtcaatag ggggtgagtc 900

aatgggtttt tcccattatt ggcacgtaca taaggtcaat aggggtgagt cattgggttt 960

ttccagccaa tttataaaac gccatgtact ttcccaccat tgacgtcaat gggctattga 1020

aactaatgca acgtgacctt taaacggtac tttcccatag ctgattaatg ggaaagtacc 1080

gttctcgagc caatacacgt caatgggaag tgaaagggca gccaaaacgt aacaccgccc 1140

cggttttccc ctggaaattc catattggca cgcattctat tggctgagct gcgttctacg 1200

tgggtataag aggcgcgacc agcgtcggta gggaccggtt tgccgccaga acacagtcag 1260

atcctcactc tcttccgcat cgctgtctgc gagggccagc tgttgggctc gcggttgagg 1320

acaaactctt cgcggtcttt ccagtactct tggatcggaa acccgtcggc ctccgaacgg 1380

tactccgcca ccgagggacc tgagcgagtc cgcatcgacc ggatcggaaa acctctcgag 1440

aaaggcgtct aaccagtcac agtcgcaagg taggctgagc accgtggcgg gcggcagcgg 1500

gtggcggtcg gggttgtttc tggcggaggt gctgctgatg atgtaattaa agtaggcggt 1560

cttgagacgg cggatggtcg aggtgaggtg tggcaggctt gagatccagc tgttggggtg 1620

agtactccct ctcaaaagcg ggcattactt ctgcgctaag attgtcagtt tccaaaaacg 1680

aggaggattt gatattcacc tggcccgatc tggccataca cttgagtgac aatgacatcc 1740

actttgcctt tctctccaca ggtgtccact cccaggtcca agtttaaacg ccgccacc 1798

<210> 690
<211> 1630
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 690
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaaga acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag attttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatcata ttacccctaa cacctgccac cccagtctta 420

atcagtggtg gaagaactct cagaactgtt tgtctcaatt ggccatttaa gtttaatagt 480

gaaagactgg ttaatgataa caatgcatcg gaaaaccttc aggaggaaag gagaatgttt 540

tgtggaacat ttttgtgtgt gtggcagttt taagttatta gttttcaaaa tcagtacttt 600

ttaatggaaa caacttgacc aaaaatctgt cacagaattt tgaacccatt aaaaaaatcg 660

ataatatatg gtagggttca tagccagagt aacctttttt tttaattttt attttatttt 720

atttttgagt cgggcgcgcc aaaatgaagt gaagttccta tactttctag agccaagatc 780

tggccgccat atactgagtc attagggact ttccaatggg ttttgcccag tacataaggt 840

caataggggt gaatcaacag gaaagtccca ttggagccaa gtacactgag tcaataggga 900

ctttccattg ggttttgccc agtacaaaag gtcaataggg ggtgagtcaa tgggtttttc 960

ccattattgg cacgtacata aggtcaatag gggtgagtca ttgggttttt ccagccaatt 1020

tataaaacgc catgtacttt cccaccattg acgtcaatgg gctattgaaa ctaatgcaac 1080

gtgaccttta aacggtactt tcccatagct gattaatggg aaagtaccgt tctcgagcca 1140

atacacgtca atgggaagtg aaagggcagc caaaacgtaa caccgccccg gttttcccct 1200

ggaaattcca tattggcacg cattctattg gctgagctgc gttctacgtg ggtataagag 1260

gcgcgaccag cgtcggtagg gaccggtttg ccgccagaac acagtcagat cgcctggaga 1320

ggccatccac gctgttttga cctccatagt ggacaccggg accgatccag cctccgcggc 1380

cgggaacggt gcattggaac gcggattccc cgtgccaaga gtgacgtaag taccgcctat 1440

agagtctata ggcccacccc cttggcttct tatgcgtaag tttctgtttc catttcctct 1500

cttgtgacac atttcatgac tctgcattta cataacccct gactcatggt cttcccactc 1560

ttgttctctc agagcttcct tcttcttttt cctagaagct cagaataaac gctcaacttt 1620

ggccgccacc 1630

<210> 691
<211> 3898
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 691
ggggcttgct cacctcgagt acgatagccg gctaatcagc cataccacat ttgtagaggt 60

tttacttgct ttaaaaaacc tcccacacct ccccctgaac ctgaaacata aaatgaatgc 120

aattgttgtt gttaacttgt ttattgcagc ttataatggt tacaaataaa gcaatagcat 180

cacaaatttc acaaataaag catttttttc actgcattct agttgtggtt tgtccaaact 240

catcaatgta tcttatcatg tctggtattc ggacggtgaa ctgggccttt cgcccgggct 300

aattatgggg tgtcgccctt cgctgaaggc cctccgcgcc tacagctcaa gccacatccg 360

aaggggggagg gagccgggag ctgcgcgcgg ggccgccggg gggaggggtg gcaccgccca 420

cgccgggcgg ccacgaaggg cggggcagcg ggcgcgcgcc cggcgggggg aggggccgcg 480

cgccgcgccc gctgggaatt ggggccctag ggggagggcg gaggcgccga cgaccgcggc 540

acttaccgtt cgcggcgtgg cgcccggtgg tccccaaggg gagggaaggg ggaggcgggg 600

cgaggacagt gaccggagtc tcctcagcgg tggcttttct gcttggcagc ctcagcggct 660

ggcgccaaaa ccggactccg cccacttcct cgcccctgcg gtgcgagggt gtggaatcct 720

ccagacgctg ggggaggggg agttgggagc ttaaaaacta gtaccccttt gggaccactt 780

tcagcagcga actctcctgt acaccagggg tcagttccac agacgcgggc caggggtggg 840

tcattgcggc gtgaacaata atttgactag aagttgattc gggtgtttcc ggaaggggcc 900

gagtcaatcc gccgagttgg ggcacggaaa acaaaaaggg aaggctacta agatttttct 960

ggcgggggtt atcattggcg taactgcagg gaccacctcc cgggttgagg gggctggatc 1020

tccaggctgc ggattaagcc cctcccgtcg gcgttaattt caaactgcgc gaccgtttct 1080

cacctgcctt gcgccaaggc agggggcggg accctattcc aagaggtagt aactagcagg 1140

actctagcct tccgcaattc attgagcgca tttacggaag taacgtcggg tactgtctct 1200

ggccgcaagg gtgggaggag tacgcatttg gcgtaaggtg gggcgtagag ccttcccgcc 1260

attggcggcg gatagggcgt ttacgcgacg gcctgacgta gcggatgacg cgttagtggg 1320

ggggaaggtt ctagaaaagc ggcggcagcg gctctagcgg cagtagcagc agcgccgggt 1380

cccgtgcgga ggtgctcctc gcagagttgt ttctcgagca gcggcagttc tcactacagc 1440

gccaggacga gtccggttcg tgttcgtccg cggagatcga tctctctcat ctcgctcggc 1500

tgcgggaaat cgggctgaag cgactgagtc cgcgatggag gtaacgggtt tgaaatcaat 1560

gagttattga aaagggcatg gcgaggccgt tggcgcctca gtggaagtcg gccagccgcc 1620

tccgtgggag agaggcagga aatcggacca attcagtagc agtggggctt aaggtttatg 1680

aacggggtct tgagcggagg cctgagcgta caaacagctt ccccaccctc agcctcccgg 1740

cgccatttcc cttcactggg ggtgggggat ggggagcttt cacatggcgg acgctgcccc 1800

gctggggtga aagtggggcg cggaggcggg aattcttatt ccctttctaa agcacgctgc 1860

ttcgggggcc acggcgactc ctcggcgtcc gatatttgaa aatatggcat attgaaaatg 1920

tcgccgatgt gagtttctgt gtaactgata tcgccatttt tccaaaagtg atttttgggc 1980

atacgcgata tctggcgata gcgcttatat cgtttacggg ggatggcgat agacgacttt 2040

ggtgacttgg gcgattctgt gtgtcgcaaa tatcgcagtt tcgatatagg tgacagacga 2100

tatgaggcta tatcgccgat agaggcgaca tcaagctggc acatggccaa tgcatatcga 2160

tctatacatt gaatcaatat tggccattag ccatattatt cattggttat atagcataaa 2220

tcaatattgg ctattggcca ttgcatacgt tgtatccata tcataatatg tacatttata 2280

ttggctcatg tccaacatta ccgccatgtt gacattgatt attgactagt tattaatagt 2340

aatcaattac ggggtcatta gttcatagcc catatatgga gttccgcgtt acataactta 2400

cggtaaatgg cccgcctggc tgaccgccca acgacccccg cccattgacg tcaataatga 2460

cgtatgttcc catagtaacg ccaatagggga ctttccattg acgtcaatgg gtggagtatt 2520

tacggtaaac tgcccacttg gcagtacatc aagtgtatca tatgccaagt acgccccta 2580

ttgacgtcaa tgacggtaaa tggcccgcct ggcattatgc ccagtacatg accttatggg 2640

actttcctac ttggcagtac atctacgtat tagtcatcgc tattaccatg gtgatgcggt 2700

tttggcagta catcaatggg cgtggatagc ggtttgactc acggggattt ccaagtctcc 2760

accccattga cgtcaatggg agtttgtttt ggcaccaaaa tcaacgggac tttccaaaat 2820

gtcgtaacaa ctccgcccca ttgacgcaaa tgggcggtag gcgtgtacgg tgggaggtct 2880

atataagcag agctcgttta gtgaaccgtc agatcgcctg gagacgccat ccacgctgtt 2940

ttgacctcca tagaagatac cgggaccgat ccagcctccg cggccgggaa cggtgcattg 3000

gaacgcggat tccccgtgcc aagagtgacg taagtaccgc ctatagagtc tataggccca 3060

ccccccttggc ttcttatgca tgctatactg tttttggctt ggggtctata cacccccgct 3120

tcctcatgtt ataggtgatg gtatagctta gcctataggt gtgggttatt gaccattatt 3180

gaccactccc ctattggtga cgatactttc cattactaat ccataacatg gctctttgcc 3240

acaactctct ttattggcta tatgccaata cactgtcctt cagagactga cacggactct 3300

gtatttttac aggatgggtt ctcatttatt atttacaaat tcacatatac aacaccaccg 3360

tccccagtgc ccgcagtttt tattaaacat aacgtgggat ctccacgcga atctcgggta 3420

cgtgttccgg acatgggttc ttctccggta gcggcggagc ttctacatcc gagccctgct 3480

cccatgcctc cagcgactca tggtcgctcg gcagctcctt gctcctaaca gtggaggcca 3540

gacttaggca cagcacgatg cccaccacca ccagtgtgcc gcacaaggcc gtggcggtag 3600

ggtatgtgtc tgaaaatgag ctcggggagc gggcttgcac cgctgacgca tttgaaagac 3660

ttaaggcagc ggcagaagaa gatgcaggca gctgagttgt tgtgttctga taagagtcag 3720

aggtaactcc cgttgcggtg ctgttaacgg tggagggcag tgtagtctga gcagtactcg 3780

ttgctgccgc gcgcgccacc agacataata gctgacagac taacagactg ttcctttcca 3840

tgggtctttt ctgcagtcac cgtccttgac acgaagtttg ctcgagccgc caccaaaa 3898

<210> 692
<211> 2505
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 692
ccgcctagga cgggggaggc taactgaaac acggaaggag acaataccgg aaggaacccg 60

cgctatgacg gcaataaaaa gacagaataa aacgcacggg tgttgggtcg tttgttcata 120

aacgcggggt tcggtcccag ggctggcact ctgtcgatac cccaccgagt ccccattggg 180

gccaatacgc ccgcgtttct tccttttccc cacccccaccc cccaagttcg ggtgaaggcc 240

cagggctcgc agccaacgtc ggggcggcag gccctgccat agaaatcgat aatatatggt 300

agggttcata gccagagtaa cctttttttt taatttttat tttattttat ttttgagtcg 360

ggcgcgccaa aatgaagtga agttcctata ctttctagag cgagctcacg gggacagccc 420

```
ccccccaaag cccccaggga tgtaattacg tccctccccc gctaggggggc agcagcgagc      480

cgcccggggc tccgctccgg tccggcgctc cccccgcatc cccgagccgg cagcgtgcgg      540

ggacagcccg ggcacgggga aggtggcacg ggatcgcttt cctctgaacg cttctcgctg      600

ctctttgagc ctgcagacac ctgggggggat acggggaaaa agctttaggc tgaaagagag      660

atttagaatg acaggcgagc tcacggggac agccccccccc caaagccccc agggatgtaa      720

ttacgtccct cccccgctag ggggcagcag cgagccgccc ggggctccgc tccggtccgg      780

cgctcccccc gcatccccga gccggcagcg tgcggggaca gcccgggcac ggggaaggtg      840

gcacgggatc gctttcctct gaacgcttct cgctgctctt tgagcctgca gacacctggg      900

gggatacggg gaaaaagctt gaaacttgat ctgtcgccgc aattcaagct tcgtgaggct      960

ccggtgcccg tcagtgacct gctatactct ggagacgcct ctcccggcca gaggagcaag     1020

gtatgcggga ggcgaccagg aggatagcgg ggctgacgtc gggaggtggc ctccgtggga     1080

aggacacccg gatcttgaca cagccttggc agcggagtca ggaagagtag gggtaggttc     1140

tggacgccct cttggccagc tcatcgccgc cccaccctct gctggagcac agagtaattc     1200

atacaaaagg agggatcgcc ttcgcaaggg gagagcccag ggaccgtccc taaattctca     1260

cagacccaaa tccctgtagc cgccccacga cagcgcgagg agcatgcgcc cagggctgag     1320

cgcgggtaga tcagagcaca caagctcaca gtccccggcg gtgggggggag gggcgcgctg     1380

agcgggggcc agggagctgg cgcggggcaa actgggaaag tggtgtcgtg tgctggctcc     1440

gccctcttcc cgagggtggg ggagaacggt atataagtgc ggtagtcgcc ttggacgttc     1500

tttttcgcaa cgggtttgcc gtcagaacgc aggtgagtgg cgggtgtggc ttccgcgggc     1560

cccggagctg gagccctgct ctgagcgggc cgggctgata tgcgagtgtc gtccgcaggg     1620

tttagctgtg agcattccca cttcgagtgg cgggcggtgc gggggtgaga gtgcgaggcc     1680

tagcggcaac cccgtagcct cgcctcgtgt ccggcttgag gcctagcgtg gtgtccgccg     1740

ccgcgtgcca ctccggccgc actatgcgtt ttttgtcctt gctgccctcg attgccttcc     1800

agcagcatgg gctaacaaag ggagggtgtg gggctcactc ttaaggagcc catgaagctt     1860

acgttggata ggaatggaag ggcaggaggg gcgactgggg cccgcccgcc ttcggagcac     1920
```

atgtccgacg ccacctggat ggggcgaggc ctgtggcttt ccgaagcaat cgggcgtgag 1980

tttagcctac ctgggccatg tggccctagc actgggcacg gtctggcctg gcggtgccgc 2040

gttcccttgc ctcccaacaa gggtgaggcc gtcccgcccg gcaccagttg cttgcgcgga 2100

aagatggccg ctcccggggc cctgttgcaa ggagctcaaa atggaggacg cggcagcccg 2160

gtggagcggg cgggtgagtc acccacacaa aggaagaggg ccttgcccct cgccggccgc 2220

tgcttcctgt gaccccgtgg tctatcggcc gcatagtcac ctcgggcttc tcttgagcac 2280

cgctcgtcgc ggcgggggga ggggatctaa tggcgttgga gtttgttcac atttggtggg 2340

tggagactag tcaggccagc ctggcgctgg aagtcattct tggaatttgc ccctttgagt 2400

ttggagcgag gctaattctc aagcctctta gcggttcaaa ggtattttct aaacccgttt 2460

ccaggtgttg tgaaagccac cgctaattca aagcaagccg ccacc 2505

<210> 693
<211> 3252
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 693
ccgcctagga caatcaacct ctggattaca aaatttgtga aagattgact ggtattctta 60

actatgttgc tccttttacg ctatgtggat acgctgcttt aatgcctttg tatcatgcta 120

ttgcttcccg tatggctttc attttctcct ccttgtataa atcctggttg ctgtctcttt 180

atgaggagtt gtggcccgtt gtcaggcaac gtggcgtggt gtgcactgtg tttgctgacg 240

caacccccac tggttggggc attgccacca cctgtcagct cctttccggg actttcgctt 300

tccccctccc tattgccacg gcggaactca tcgccgcctg ccttgcccgc tgctggacag 360

gggctcggct gttgggcact gacaattccg tggtgttgtc ggggaaatca tcgtcctttc 420

cttggctgct cgcctgtgtt gccacctgga ttctgcgcgg gacgtccttc tgctacgtcc 480

cttcggccct caatccagcg gaccttcctt cccgcggcct gctgccggct ctgcggcctc 540

ttccgcctct tcgccttcgc cctcagacga gtcggatctc cctttgggcc gcctccccgc 600

ccatgtatct ttttcacctg tgccttgttt ttgcctgtgt tccatgtcct acttttcaag 660

cctccaagct gtgccttgga tggctttggg gcatggacat agatccctat aaagaatttg 720

gttcatctta tcagttgttg aattttcttc ctttggacgg gggaggctaa ctgaaacacg 780

gaaggagaca ataccggaag gaacccgcgc tatgacggca ataaaaagac agaataaaac 840

gcacgggtgt tgggtcgttt gttcataaac gcggggttcg gtcccagggc tggcactctg 900

tcgatacccc accgagtccc cattggggcc aatacgcccg cgtttcttcc ttttccccac 960

cccacccccc aagttcgggt gaaggcccag ggctcgcagc caacgtcggg gcggcaggcc 1020

ctgccataga aatcgataat atatggtagg gttcatagcc agagtaacct tttttttaa 1080

tttttatttt attttatttt tgagtcgggc gcgccaaaat gaagtgaagt tcctatactt 1140

tctagagcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 1200

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 1260

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 1320

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 1380

gggaaaaagc tttaggctga aagagagatt tagaatgaca ggcgagctca cggggacagc 1440

ccccccccaa agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga 1500

gccgcccggg gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc 1560

ggggacagcc cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc 1620

tgctctttga gcctgcagac acctgggggg atacggggaa aaagcttgaa acttgatctg 1680

tcgccgcaat tcaagcttcg tgaggctccg gtgcccgtca gtgacctgct atactctgga 1740

gacgcctctc ccggccagag gagcaaggta tgcgggaggc gaccaggagg atagcggggc 1800

tgacgtcggg aggtggcctc cgtgggaagg acacccggat cttgacacag ccttggcagc 1860

ggagtcagga agagtagggg taggttctgg acgccctctt ggccagctca tcgccgcccc 1920

accctctgct ggagcacaga gtaattcata caaaaggagg gatcgccttc gcaaggggag 1980

agcccaggga ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag 2040

cgcgaggagc atgcgcccag ggctgagcgc gggtagatca gagcacacaa gctcacagtc 2100

cccggcggtg gggggagggg cgcgctgagc gggggccagg gagctggcgc ggggcaaact 2160

gggaaagtgg tgtcgtgtgc tggctccgcc ctcttcccga gggtgggggа gaacggtata 2220

taagtgcggt agtcgccttg gacgttcttt ttcgcaacgg gtttgccgtc agaacgcagg 2280

tgagtggcgg gtgtggcttc cgcgggcccc ggagctggag ccctgctctg agcgggccgg 2340

gctgatatgc gagtgtcgtc cgcagggttt agctgtgagc attcccactt cgagtggcgg 2400

gcggtgcggg ggtgagagtg cgaggcctag cggcaacccc gtagcctcgc ctcgtgtccg 2460

gcttgaggcc tagcgtggtg tccgccgccg cgtgccactc cggccgcact atgcgttttt 2520

tgtccttgct gccctcgatt gccttccagc agcatgggct aacaaaggga gggtgtgggg 2580

ctcactctta aggagcccat gaagcttacg ttggatagga atggaagggc aggaggggcg 2640

actggggccc gcccgccttc ggagcacatg tccgacgcca cctggatggg gcgaggcctg 2700

tggctttccg aagcaatcgg gcgtgagttt agcctacctg ggccatgtgg ccctagcact 2760

gggcacggtc tggcctggcg gtgccgcgtt cccttgcctc ccaacaaggg tgaggccgtc 2820

ccgcccggca ccagttgctt gcgcggaaag atggccgctc ccggggccct gttgcaagga 2880

gctcaaaatg gaggacgcgg cagcccggtg gagcgggcgg gtgagtcacc cacacaaagg 2940

aagagggcct tgcccctcgc cggccgctgc ttcctgtgac cccgtggtct atcggccgca 3000

tagtcacctc gggcttctct tgagcaccgc tcgtcgcggc ggggggaggg gatctaatgg 3060

cgttggagtt tgttcacatt tggtgggtgg agactagtca ggccagcctg gcgctggaag 3120

tcattcttgg aatttgcccc tttgagtttg gagcgaggct aattctcaag cctcttagcg 3180

gttcaaaggt attttctaaa cccgtttcca ggtgttgtga aagccaccgc taattcaaag 3240

caagccgcca cc 3252

<210> 694
<211> 3231
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 694
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcagctggac 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt atacatcgtt 420

tccatggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcggg ggaggctaac tgaaacacgg aaggagacaa taccggaagg 780

aacccgcgct atgacggcaa taaaaagaca gaataaaacg cacgggtgtt gggtcgtttg 840

ttcataaacg cggggttcgg tcccagggct ggcactctgt cgatacccca ccgagtcccc 900

attggggcca atacgcccgc gtttcttcct tttccccacc ccacccccca agttcgggtg 960

aaggcccagg gctcgcagcc aacgtcgggg cggcaggccc tgccatagaa atcgataata 1020

tatggtaggg ttcatagcca gagtaacctt ttttttaat ttttatttta ttttattttt 1080

gagtcgggcg cgccaaaatg aagtgaagtt cctatacttt ctagagcgag ctcacgggga 1140

cagccccccc ccaaagcccc cagggatgta attacgtccc tcccccgcta gggggcagca 1200

gcgagccgcc cggggctccg ctccggtccg gcgctccccc cgcatccccg agccggcagc 1260

gtgcggggac agcccgggca cggggaaggt ggcacgggat cgctttcctc tgaacgcttc 1320

tcgctgctct ttgagcctgc agacacctgg ggggatacgg ggaaaaagct ttaggctgaa 1380

agagagattt agaatgacag gcgagctcac ggggacagcc ccccccccaaa gcccccaggg 1440

atgtaattac gtccctcccc cgctaggggg cagcagcgag ccgcccgggg ctccgctccg 1500

gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg gggacagccc gggcacgggg 1560

aaggtggcac gggatcgctt tcctctgaac gcttctcgct gctctttgag cctgcagaca 1620

cctgggggga tacggggaaa aagcttgaaa cttgatctgt cgccgcaatt caagcttcgt 1680

gaggctccgg tgcccgtcag tgacctgcta tactctggag acgcctctcc cggccagagg 1740

agcaaggtat gcgggaggcg accaggagga tagcggggct gacgtcggga ggtggcctcc 1800

gtgggaagga cacccggatc ttgacacagc cttggcagcg gagtcaggaa gagtaggggt 1860

aggttctgga cgccctcttg gccagctcat cgccgcccca ccctctgctg gagcacagag 1920

taattcatac aaaaggaggg atcgccttcg caaggggaga gcccagggac cgtccctaaa 1980

ttctcacaga cccaaatccc tgtagccgcc ccacgacagc gcgaggagca tgcgcccagg 2040

gctgagcgcg ggtagatcag agcacacaag ctcacagtcc ccggcggtgg ggggaggggc 2100

gcgctgagcg ggggccaggg agctggcgcg gggcaaactg ggaaagtggt gtcgtgtgct 2160

ggctccgccc tcttcccgag ggtgggggag aacggtatat aagtgcggta gtcgccttgg 2220

acgttctttt tcgcaacggg tttgccgtca gaacgcaggt gagtggcggg tgtggcttcc 2280

gcgggccccg gagctggagc cctgctctga gcgggccggg ctgatatgcg agtgtcgtcc 2340

gcagggttta gctgtgagca ttcccacttc gagtggcggg cggtgcgggg gtgagagtgc 2400

gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct agcgtggtgt 2460

ccgccgccgc gtgccactcc ggccgcacta tgcgtttttt gtccttgctg ccctcgattg 2520

ccttccagca gcatgggcta acaaagggag ggtgtggggc tcactcttaa ggagcccatg 2580

aagcttacgt tggataggaa tggaagggca ggaggggcga ctggggcccg cccgccttcg 2640

gagcacatgt ccgacgccac ctggatgggg cgaggcctgt ggctttccga agcaatcggg 2700

cgtgagttta gcctacctgg gccatgtggc cctagcactg ggcacggtct ggcctggcgg 2760

tgccgcgttc ccttgcctcc caacaagggt gaggccgtcc cgcccggcac cagttgcttg 2820

cgcggaaaga tggccgctcc cggggccctg ttgcaaggag ctcaaaatgg aggacgcggc 2880

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctt gcccctcgcc 2940

ggccgctgct tcctgtgacc ccgtggtcta tcggccgcat agtcacctcg ggcttctctt 3000

gagcaccgct cgtcgcggcg gggggagggg atctaatggc gttggagttt gttcacattt 3060

ggtgggtgga gactagtcag gccagcctgg cgctggaagt cattcttgga atttgcccct 3120

ttgagtttgg agcgaggcta attctcaagc ctcttagcgg ttcaaaggta ttttctaaac 3180

ccgtttccag gtgttgtgaa agccaccgct aattcaaagc aagccgccac c 3231

<210> 695
<211> 3106
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 695
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca actcccactg gttggggcat ttgcaccacc tgtcaactca tttccggtac 300

tttcggtttc tcacttccga ttgctaccgc ggagcttata gccgcctgcc ttgctcgctg 360

ctggacagga gctcggttgt tgggcactga taactccgtg gtcctctccg gtaagctaac 420

ttcgtttcca tggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcgtctgc cccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgcct gtgggggagg ctaactgaaa cacggaagga gacaataccg gaaggaaccc 660

gcgctatgac ggcaataaaa agacagaata aaacgcacgg gtgttgggtc gtttgttcat 720

aaacgcgggg ttcggtccca gggctggcac tctgtcgata ccccaccgag tccccattgg 780

ggccaatacg cccgcgtttc ttccttttcc ccaccccacc ccccaagttc gggtgaaggc 840

ccagggctcg cagccaacgt cggggcggca ggccctgcca tagaaatcga taatatatgg 900

tagggttcat agccagagta acctttttt ttaatttta ttttatttta tttttgagtc 960

gggcgcgcca aaatgaagtg aagttcctat actttctaga gcgagctcac ggggacagcc 1020

ccccccccaaa gcccccaggg atgtaattac gtccctcccc cgctaggggg cagcagcgag 1080

ccgcccgggg ctccgctccg gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg 1140

gggacagccc gggcacgggg aaggtggcac gggatcgctt tcctctgaac gcttctcgct 1200

gctctttgag cctgcagaca cctgggggga tacggggaaa aagctttagg ctgaaagaga 1260

gatttagaat gacaggcgag ctcacgggga cagcccccc ccaaagcccc cagggatgta 1320

attacgtccc tcccccgcta gggggcagca gcgagccgcc cggggctccg ctccggtccg 1380

gcgctccccc cgcatccccg agccggcagc gtgcggggac agcccgggca cggggaaggt 1440

ggcacgggat cgctttcctc tgaacgcttc tcgctgctct ttgagcctgc agacacctgg 1500

ggggatacgg ggaaaaagct tgaaacttga tctgtcgccg caattcaagc ttcgtgaggc 1560

tccggtgccc gtcagtgacc tgctatactc tggagacgcc tctcccggcc agaggagcaa 1620

ggtatgcggg aggcgaccag gaggatagcg gggctgacgt cgggaggtgg cctccgtggg 1680

aaggacaccc ggatcttgac acagccttgg cagcggagtc aggaagagta ggggtaggtt 1740

ctggacgccc tcttggccag ctcatcgccg ccccaccctc tgctggagca cagagtaatt 1800

catacaaaag gagggatcgc cttcgcaagg ggagagccca gggaccgtcc ctaaattctc 1860

acagacccaa atccctgtag ccgccccacg acagcgcgag gagcatgcgc ccagggctga 1920

gcgcgggtag atcagagcac acaagctcac agtccccggc ggtgggggga ggggcgcgct 1980

gagcgggggc cagggagctg gcgcggggca aactgggaaa gtggtgtcgt gtgctggctc 2040

cgccctcttc ccgagggtgg gggagaacgg tatataagtg cggtagtcgc cttggacgtt 2100

ctttttcgca acgggtttgc cgtcagaacg caggtgagtg gcgggtgtgg cttccgcggg 2160

ccccggagct ggagccctgc tctgagcggg ccgggctgat atgcgagtgt cgtccgcagg 2220

gtttagctgt gagcattccc acttcgagtg gcgggcggtg cgggggtgag agtgcgaggc 2280

ctagcggcaa ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcc 2340

gccgcgtgcc actccggccg cactatgcgt tttttgtcct tgctgccctc gattgccttc 2400

cagcagcatg ggctaacaaa gggagggtgt ggggctcact cttaaggagc ccatgaagct 2460

tacgttggat aggaatggaa gggcaggagg ggcgactggg gcccgcccgc cttcggagca 2520

catgtccgac gccacctgga tggggcgagg cctgtggctt tccgaagcaa tcgggcgtga 2580

gtttagccta cctgggccat gtggccctag cactgggcac ggtctggcct ggcggtgccg 2640

cgttcccttg cctcccaaca agggtgaggc cgtcccgccc ggcaccagtt gcttgcgcgg 2700

aaagatggcc gctcccgggg ccctgttgca aggagctcaa aatggaggac gcggcagccc 2760

ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gccttgcccc tcgccggccg 2820

ctgcttcctg tgaccccgtg gtctatcggc cgcatagtca cctcgggctt ctcttgagca 2880

ccgctcgtcg cggcgggggg aggggatcta atggcgttgg agtttgttca catttggtgg 2940

gtggagacta gtcaggccag cctggcgctg gaagtcattc ttggaatttg ccccttgag 3000

tttggagcga ggctaattct caagcctctt agcggttcaa aggtattttc taaacccgtt 3060

tccaggtgtt gtgaaagcca ccgctaattc aaagcaagcc gccacc 3106

<210> 696
<211> 3290
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 696
ccgcctagga ccaacatctt gagtcccttt atgccgctgt taccaatttt cttttgtctt 60

tgggtataca tttaaaccct aacaaaacaa aaagatgggg atattccctt aacttcatgg 120

gatatgtaat tgggagttgg ggcacatggc cacaggatca tattgtacaa aacttcaaac 180

tatgttttag aaaacttcct gttaatcaac ctctggatta caaaatttgt gaaagattga 240

ctggtattct taactatgtt gctcctttta cgctatgtgg atacgctgct ttaatgcctt 300

tgtatcatgc tattgcttcc cgtatggctt tcattttctc ctccttgtat aaatcctggt 360

tgctgtctct ttatgaggag ttgtggcccg ttgtcaggca acgtggcgtg gtgtgcactg 420

tgtttgctga cgcaaccccc actggttggg gcatttgcac cacctatcaa ctcatttccc 480

cgacgggcgc ttttgccctg ccgatcgcca ccgcggacgt catcgccgcc tgccttgctc 540

gctgctggac aggagctcgg ctgttgggca ctgacaactc cgtggttctt tcgggcaaac 600

tgacttccta tccatggctg ctcgcctgtg ttgccaactg gattcttcgc gggacgtcct 660

tctgttacgt cccctccgcg gacaacccag cggaccttcc ttcccgggga cttctgccgg 720

ctctccgtcc tctgccgctt ctgcgttttc gtccggtcac caagcggata tccctgtggg 780

ccgcctcccc gcctgtgggg gaggctaact gaaacacgga aggagacaat accggaagga 840

acccgcgcta tgacggcaat aaaaagacag aataaaacgc acgggtgttg ggtcgtttgt 900

tcataaacgc ggggttcggt cccagggctg gcactctgtc gataccccac cgagtcccca 960

ttggggccaa tacgcccgcg tttcttcctt ttccccaccc cacccccaa gttcgggtga 1020

aggcccaggg ctcgcagcca acgtcggggc ggcaggccct gccatagaaa tcgataatat 1080

atggtagggt tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg 1140

agtcgggcgc gccaaaatga agtgaagttc ctatactttc tagagcgagc tcacggggac 1200

agcccccccc caaagccccc agggatgtaa ttacgtccct cccccgctag ggggcagcag 1260

cgagccgccc ggggctccgc tccggtccgg cgctcccccc gcatccccga gccggcagcg 1320

tgcggggaca gcccgggcac ggggaaggtg gcacgggatc gctttcctct gaacgcttct 1380

cgctgctctt tgagcctgca gacacctggg gggatacggg gaaaaagctt taggctgaaa 1440

gagagattta gaatgacagg cgagctcacg gggacagccc ccccccaaag cccccaggga 1500

tgtaattacg tccctccccc gctaggggggc agcagcgagc cgcccggggc tccgctccgg 1560

tccggcgctc cccccgcatc cccgagccgg cagcgtgcgg ggacagcccg ggcacgggga 1620

aggtggcacg ggatcgcttt cctctgaacg cttctcgctg ctctttgagc ctgcagacac 1680

ctgggggggat acggggaaaa agcttgaaac ttgatctgtc gccgcaattc aagcttcgtg 1740

aggctccggt gcccgtcagt gacctgctat actctggaga cgcctctccc ggccagagga 1800

gcaaggtatg cgggaggcga ccaggaggat agcggggctg acgtcgggag gtggcctccg 1860

tgggaaggac acccggatct tgacacagcc ttggcagcgg agtcaggaag agtaggggta 1920

ggttctggac gccctcttgg ccagctcatc gccgccccac cctctgctgg agcacagagt 1980

aattcataca aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat 2040

tctcacagac ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgcccaggg 2100

ctgagcgcgg gtagatcaga gcacacaagc tcacagtccc cggcggtggg gggaggggcg 2160

cgctgagcgg gggccaggga gctggcgcgg ggcaaactgg gaaagtggtg tcgtgtgctg 2220

gctccgccct cttcccgagg gtgggggaga acggtatata agtgcggtag tcgccttgga 2280

cgttcttttt cgcaacgggt ttgccgtcag aacgcaggtg agtggcgggt gtggcttccg 2340

cgggccccgg agctggagcc ctgctctgag cgggccgggc tgatatgcga gtgtcgtccg 2400

cagggtttag ctgtgagcat tcccacttcg agtggcgggc ggtgcggggg tgagagtgcg 2460

aggcctagcg gcaaccccgt agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc 2520

cgccgccgcg tgccactccg gccgcactat gcgtttttg tccttgctgc cctcgattgc 2580

cttccagcag catgggctaa caaagggagg gtgtggggct cactcttaag gagcccatga 2640

agcttacgtt ggataggaat ggaagggcag gaggggcgac tggggcccgc ccgccttcgg 2700

agcacatgtc cgacgccacc tggatggggc gaggcctgtg gctttccgaa gcaatcgggc 2760

gtgagtttag cctacctggg ccatgtggcc ctagcactgg gcacggtctg gcctggcggt 2820

gccgcgttcc cttgcctccc aacaagggtg aggccgtccc gcccggcacc agttgcttgc 2880

gcggaaagat ggccgctccc ggggccctgt tgcaaggagc tcaaaatgga ggacgcggca 2940

gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa gagggccttg cccctcgccg 3000

gccgctgctt cctgtgaccc cgtggtctat cggccgcata gtcacctcgg gcttctcttg 3060

agcaccgctc gtcgcggcgg ggggagggga tctaatggcg ttggagtttg ttcacatttg 3120

gtgggtggag actagtcagg ccagcctggc gctggaagtc attcttggaa tttgcccctt 3180

tgagtttgga gcgaggctaa ttctcaagcc tcttagcggt tcaaaggtat tttctaaacc 3240

cgtttccagg tgttgtgaaa gccaccgcta attcaaagca agccgccacc 3290

<210> 697
<211> 3226
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 697
ccgcctagga cttccactca acaaaccttt agattataaa atctgtgaaa ggttaacagg 60

cattctgaat tatgttgctc cttttactaa atgtggttat gctgctctcc ttcctttgta 120

tcaagctact tcgcgtacgg catttgtgtt ttcttctctc taccacagct ggttgctgtc 180

cctttatgct gagttgtggc ctgttgccag gcaacgtggc gtggtgtgct ctgtgtctga 240

cgcaaccccc actggttggg gcatttgcac cacctatcaa ctcatttccc cgacgggcgc 300

ttttgccctg ccgatcgcca ccgcggacgt catcgccgcc tgccttgctc gctgctggac 360

aggagctcgg ctgttgggca ctgacaactc cgtggttctt tcgggcaaac tgacttccta 420

tccatggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacctg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgggggggagg ctaactgaaa cacggaagga gacaataccg gaaggaaccc 780

gcgctatgac ggcaataaaa agacagaata aaacgcacgg gtgttgggtc gtttgttcat 840

aaacgcgggg ttcggtccca gggctggcac tctgtcgata ccccaccgag tccccattgg 900

ggccaatacg cccgcgtttc ttccttttcc ccaccccacc ccccaagttc gggtgaaggc 960

ccagggctcg cagccaacgt cggggcggca ggccctgcca tagaaatcga taatatatgg 1020

tagggttcat agccagagta acctttttttt ttaattttta ttttatttta tttttgagtc 1080

gggcgcgcca aaatgaagtg aagttcctat actttctaga gcgagctcac ggggacagcc 1140

ccccccaaa gcccccaggg atgtaattac gtccctcccc cgctaggggg cagcagcgag 1200

ccgcccgggg ctccgctccg gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg 1260

gggacagccc gggcacgggg aaggtggcac gggatcgctt tcctctgaac gcttctcgct 1320

gctctttgag cctgcagaca cctgggggga tacggggaaa aagctttagg ctgaaagaga 1380

gatttagaat gacaggcgag ctcacgggga cagcccccc ccaaagcccc cagggatgta 1440

attacgtccc tcccccgcta gggggcagca gcgagccgcc cggggctccg ctccggtccg 1500

gcgctccccc cgcatccccg agccggcagc gtgcggggac agcccgggca cggggaaggt 1560

ggcacgggat cgctttcctc tgaacgcttc tcgctgctct ttgagcctgc agacacctgg 1620

ggggatacgg ggaaaaagct tgaaacttga tctgtcgccg caattcaagc ttcgtgaggc 1680

tccggtgccc gtcagtgacc tgctatactc tggagacgcc tctcccggcc agaggagcaa 1740

ggtatgcggg aggcgaccag gaggatagcg gggctgacgt cgggaggtgg cctccgtggg 1800

aaggacaccc ggatcttgac acagccttgg cagcggagtc aggaagagta ggggtaggtt 1860

ctggacgccc tcttggccag ctcatcgccg ccccaccctc tgctggagca cagagtaatt 1920

catacaaaag gagggatcgc cttcgcaagg ggagagccca gggaccgtcc ctaaattctc 1980

acagacccaa atccctgtag ccgccccacg acagcgcgag gagcatgcgc ccagggctga 2040

gcgcgggtag atcagagcac acaagctcac agtccccggc ggtgggggga ggggcgcgct 2100

gagcgggggc cagggagctg gcgcggggca aactgggaaa gtggtgtcgt gtgctggctc 2160

cgccctcttc ccgagggtgg gggagaacgg tatataagtg cggtagtcgc cttggacgtt 2220

ctttttcgca acgggtttgc cgtcagaacg caggtgagtg gcgggtgtgg cttccgcggg 2280

ccccggagct ggagccctgc tctgagcggg ccgggctgat atgcgagtgt cgtccgcagg 2340

gtttagctgt gagcattccc acttcgagtg gcgggcggtg cgggggtgag agtgcgaggc 2400

ctagcggcaa ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcc 2460

gccgcgtgcc actccggccg cactatgcgt tttttgtcct tgctgccctc gattgccttc 2520

cagcagcatg ggctaacaaa gggagggtgt ggggctcact cttaaggagc ccatgaagct 2580

tacgttggat aggaatggaa gggcaggagg ggcgactggg gcccgcccgc cttcggagca 2640

catgtccgac gccacctgga tggggcgagg cctgtggctt tccgaagcaa tcgggcgtga 2700

gtttagccta cctgggccat gtggccctag cactgggcac ggtctggcct ggcggtgccg 2760

cgttcccttg cctcccaaca agggtgaggc cgtcccgccc ggcaccagtt gcttgcgcgg 2820

aaagatggcc gctcccgggg ccctgttgca aggagctcaa aatggaggac gcggcagccc 2880

ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gccttgcccc tcgccggccg 2940

ctgcttcctg tgaccccgtg gtctatcggc cgcatagtca cctcgggctt ctcttgagca 3000

ccgctcgtcg cggcgggggg aggggatcta atggcgttgg agtttgttca catttggtgg 3060

gtggagacta gtcaggccag cctggcgctg gaagtcattc ttggaatttg ccccttgag 3120

tttggagcga ggctaattct caagcctctt agcggttcaa aggtattttc taaacccgtt 3180

tccaggtgtt gtgaaagcca ccgctaattc aaagcaagcc gccacc 3226

<210> 698
<211> 3290
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 698
ccgcctagga cgagcatctt accgccattt attcccatat ttgctctgtt tttcttgatt 60

tgggcataca tttaaatgta gccaaaacta aatggtgggg acatcattta catttcatgg 120

gttatgttat tactggagca ggaattttac cccaagataa acatgtgcaa aaagtatcaa 180

catatttgaa atccattcct gtaaacaggc ctattgattg gaaagtttgt caacgaattg 240

tgggtctttt ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt 300

tatatgcatg tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc 360

tcagtaaaca gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag 420

tgtttgctga cgcaactccc actggttggg gcatttgcac cacctgtcaa ctcatttccg 480

gtactttcgg tttctcactt ccgattgcta ccgcggagct tatagccgcc tgccttgctc 540

gctgctggac aggagctcgg ttgttgggca ctgataactc cgtggtcctc tccggtaagc 600

taacttcgtt tccatggctg ctcgcctgtg ttgccaactg gattcttcgc gggacgtcgt 660

tctgctacgt cccttcggca gcgaatccgg cggaccttcc ttcccgaggc cttctgccgg 720

ctctgcatcc cgtgccgact ctccgcttcc gtccgcagct gagtcgcatc tccctttggg 780

ccgcctcccc gcctgtgggg gaggctaact gaaacacgga aggagacaat accggaagga 840

acccgcgcta tgacggcaat aaaaagacag aataaaacgc acgggtgttg ggtcgtttgt 900

tcataaacgc ggggttcggt cccagggctg gcactctgtc gataccccac cgagtcccca 960

ttggggccaa tacgcccgcg tttcttcctt ttccccaccc caccccccaa gttcgggtga 1020

aggcccaggg ctcgcagcca acgtcggggc ggcaggccct gccatagaaa tcgataatat 1080

atggtagggt tcatagccag agtaaccttt ttttttaatt tttattttat tttatttttg 1140

agtcgggcgc gccaaaatga agtgaagttc ctatactttc tagagcgagc tcacggggac 1200

agcccccccc caaagccccc agggatgtaa ttacgtccct cccccgctag ggggcagcag 1260

cgagccgccc ggggctccgc tccggtccgg cgctcccccc gcatccccga gccggcagcg 1320

tgcggggaca gcccgggcac ggggaaggtg gcacgggatc gctttcctct gaacgcttct 1380

cgctgctctt tgagcctgca gacacctggg gggatacggg gaaaaagctt taggctgaaa 1440

gagagattta gaatgacagg cgagctcacg gggacagccc ccccccaaag cccccaggga 1500

tgtaattacg tccctccccc gctaggggggc agcagcgagc cgcccggggc tccgctccgg 1560

tccggcgctc cccccgcatc cccgagccgg cagcgtgcgg ggacagcccg ggcacgggga 1620

aggtggcacg ggatcgcttt cctctgaacg cttctcgctg ctctttgagc ctgcagacac 1680

ctgggggggat acggggaaaa agcttgaaac ttgatctgtc gccgcaattc aagcttcgtg 1740

aggctccggt gcccgtcagt gacctgctat actctggaga cgcctctccc ggccagagga 1800

gcaaggtatg cgggaggcga ccaggaggat agcggggctg acgtcgggag gtggcctccg 1860

tgggaaggac acccggatct tgacacagcc ttggcagcgg agtcaggaag agtaggggta 1920

ggttctggac gccctcttgg ccagctcatc gccgccccac cctctgctgg agcacagagt 1980

aattcataca aaaggaggga tcgccttcgc aaggggagag cccagggacc gtccctaaat 2040

tctcacagac ccaaatccct gtagccgccc cacgacagcg cgaggagcat gcgcccaggg 2100

ctgagcgcgg gtagatcaga gcacacaagc tcacagtccc cggcggtggg gggaggggcg 2160

cgctgagcgg gggccaggga gctggcgcgg ggcaaactgg gaaagtggtg tcgtgtgctg 2220

gctccgccct cttcccgagg gtgggggaga acggtatata agtgcggtag tcgccttgga 2280

cgttcttttt cgcaacgggt ttgccgtcag aacgcaggtg agtggcgggt gtggcttccg 2340

cgggccccgg agctggagcc ctgctctgag cgggccgggc tgatatgcga gtgtcgtccg 2400

cagggtttag ctgtgagcat tcccacttcg agtggcgggc ggtgcggggg tgagagtgcg 2460

aggcctagcg gcaaccccgt agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc 2520

cgccgccgcg tgccactccg gccgcactat gcgtttttg tccttgctgc cctcgattgc 2580

cttccagcag catgggctaa caaagggagg gtgtggggct cactcttaag gagcccatga 2640

agcttacgtt ggataggaat ggaagggcag gaggggcgac tggggcccgc ccgccttcgg 2700

agcacatgtc cgacgccacc tggatggggc gaggcctgtg gctttccgaa gcaatcgggc 2760

gtgagtttag cctacctggg ccatgtggcc ctagcactgg gcacggtctg gcctggcggt 2820

gccgcgttcc cttgcctccc aacaagggtg aggccgtccc gcccggcacc agttgcttgc 2880

gcggaaagat ggccgctccc ggggccctgt tgcaaggagc tcaaaatgga ggacgcggca 2940

gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa gagggccttg cccctcgccg 3000

gccgctgctt cctgtgaccc cgtggtctat cggccgcata gtcacctcgg gcttctcttg 3060

agcaccgctc gtcgcggcgg ggggagggga tctaatggcg ttggagtttg ttcacatttg 3120

gtgggtggag actagtcagg ccagcctggc gctggaagtc attcttggaa tttgcccctt 3180

tgagtttgga gcgaggctaa ttctcaagcc tcttagcggt tcaaaggtat tttctaaacc 3240

cgtttccagg tgttgtgaaa gccaccgcta attcaaagca agccgccacc 3290

<210> 699
<211> 3284
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 699
ccgcctagga ccaacatctt gagtcccttt atgccgctgt taccaatttt cttttgtctt 60

tgggtataca tttaaaccct aacaaaacaa aaagatgggg atattccctt aacttcatgg 120

gatatgtaat tgggagttgg ggcacatggc cacaggatca tattgtacaa aacttcaaac 180

tatgttttag aaaacttcca ctcaacaaac ctttagatta taaaatctgt gaaaggttaa 240

caggcattct gaattatgtt gctcctttta ctaaatgtgg ttatgctgct ctccttcctt 300

tgtatcaagc tacttcgcgt acggcatttg tgttttcttc tctctaccac agctggttgc 360

tgtcccttta tgctgagttg tggcctgttg ccaggcaacg tggcgtggtg tgctctgtgt 420

ctgacgcaac ccccactggt tggggcttgg ccataggcca tcagcgcatg cgtggaacct 480

ttgtgtctcc tctgccgatc catactgcgg aactcctagc cgcttgtttt gctcgcagct 540

ggactggagc aaacctcatc gggaccgaca attctgtcgt actctcccgc aagtatacat 600

cgtttccatg gctgctcgcc tgtgttgcca actggattct tcgcgggacg tcgttctgct 660

acgtcccttc ggcagcgaat ccggcggacc ttccttcccg aggccttctg ccggctctgc 720

atcccgtgcc gactctccgc ttccgtccgc agctgagtcg catctccctt tgggccgcct 780

ccccgcctgt gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc 840

gctatgacgg caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa 900

acgcggggtt cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg 960

ccaatacgcc cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc 1020

agggctcgca gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta 1080

gggttcatag ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg 1140

gcgcgccaaa atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc 1200

cccccaaagc ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc 1260

gcccggggct ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg 1320

gacagcccgg gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc 1380

tctttgagcc tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga 1440

tttagaatga caggcgagct cacggggaca gccccccccc aaagccccca gggatgtaat 1500

tacgtccctc ccccgctagg gggcagcagc gagccgcccg gggctccgct ccggtccggc 1560

gctccccccg catccccgag ccggcagcgt gcggggacag cccgggcacg gggaaggtgg 1620

cacgggatcg ctttcctctg aacgcttctc gctgctcttt gagcctgcag acacctgggg 1680

ggatacgggg aaaaagcttg aaacttgatc tgtcgccgca attcaagctt cgtgaggctc 1740

cggtgcccgt cagtgacctg ctatactctg gagacgcctc tcccggccag aggagcaagg 1800

tatgcgggag gcgaccagga ggatagcggg gctgacgtcg ggaggtggcc tccgtgggaa 1860

ggacacccgg atcttgacac agccttggca gcggagtcag gaagagtagg ggtaggttct 1920

ggacgccctc ttggccagct catcgccgcc ccaccctctg ctggagcaca gagtaattca 1980

tacaaaagga gggatcgcct tcgcaagggg agagcccagg gaccgtccct aaattctcac 2040

agacccaaat ccctgtagcc gccccacgac agcgcgagga gcatgcgccc agggctgagc 2100

gcgggtagat cagagcacac aagctcacag tccccggcgg tgggggggagg ggcgcgctga 2160

gcgggggcca gggagctggc gcggggcaaa ctgggaaagt ggtgtcgtgt gctggctccg 2220

ccctcttccc gagggtgggg gagaacggta tataagtgcg gtagtcgcct tggacgttct 2280

ttttcgcaac gggtttgccg tcagaacgca ggtgagtggc gggtgtggct tccgcgggcc 2340

ccggagctgg agccctgctc tgagcgggcc gggctgatat gcgagtgtcg tccgcagggt 2400

ttagctgtga gcattcccac ttcgagtggc gggcggtgcg ggggtgagag tgcgaggcct 2460

agcggcaacc ccgtagcctc gcctcgtgtc cggcttgagg cctagcgtgg tgtccgccgc 2520

cgcgtgccac tccggccgca ctatgcgttt tttgtccttg ctgccctcga ttgccttcca 2580

gcagcatggg ctaacaaagg gagggtgtgg ggctcactct taaggagccc atgaagctta 2640

cgttggatag gaatggaagg gcaggagggg cgactggggc ccgcccgcct tcggagcaca 2700

tgtccgacgc cacctggatg gggcgaggcc tgtggctttc cgaagcaatc gggcgtgagt 2760

ttagcctacc tgggccatgt ggccctagca ctgggcacgg tctggcctgg cggtgccgcg 2820

ttcccttgcc tcccaacaag ggtgaggccg tcccgcccgg caccagttgc ttgcgcggaa 2880

agatggccgc tcccggggcc ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg 2940

tggagcgggc gggtgagtca cccacacaaa ggaagagggc cttgcccctc gccggccgct 3000

gcttcctgtg accccgtggt ctatcggccg catagtcacc tcgggcttct cttgagcacc 3060

gctcgtcgcg gcgggggggag gggatctaat ggcgttggag tttgttcaca tttggtgggt 3120

ggagactagt caggccagcc tggcgctgga agtcattctt ggaatttgcc cctttgagtt 3180

tggagcgagg ctaattctca agcctcttag cggttcaaag gtattttcta aacccgtttc 3240

caggtgttgt gaaagccacc gctaattcaa agcaagccgc cacc 3284

<210> 700
<211> 3241
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 700
ccgcctagga caatcaacct ctggattaca aaatttgtga aagattgact ggtattctta 60

actatgttgc tccttttacg ctatgtggat acgctgcttt aatgcctttg tatcatgcta 120

ttgcttcccg tatggctttc attttctcct ccttgtataa atcctggttg ctgtctcttt 180

atgaggagtt gtggcccgtt gtcaggcaac gtggcgtggt gtgcactgtg tttgctgacg 240

caacccccac tggttggggc attgccacca cctgtcagct cctttccggg actttcgctt 300

tccccctccc tattgccacg gcggaactca tcgccgcctg ccttgcccgc tgctggacag 360

gggctcggct gttgggcact gacaattccg tggtgttgtc ggggaaatca tcgtcctttc 420

cttggctgct cgcctgtgtt gccacctgga ttctgcgcgg gacgtccttc tgctacgtcc 480

cttcggccct caatccagcg gaccttcctt cccgcggcct gctgccggct ctgcggcctc 540

ttccgcctct tcgccttcgc cctcagacga gtcggatctc cctttgggcc gcctccccgc 600

ccatgtatct ttttcacctg tgccttgttt ttgcctgtgt tccatgtcct acttttcaag 660

cctccaagct gtgccttgga tggctttggg gcatggacat agatccctat aaagaatttg 720

gttcatctta tcagttgttg aattttcttc ctttggacat attatcccta atacttgcca 780

ccccactctt aatcagtggt ggaagaacgg tgtcagaact gtttgtttca attggccatt 840

taagtttagt agtaaaagac tggttaatga taacaatgca tcgtaaaacc ttcagaagga 900

aaggagaatg ttttgtggac cactttggtt ttctttttg cgtgtggcag ttttaagtta 960

ttagttttta aaatcagtac tttttaatgg aaacaacttg accaaaaatt tgtcacagaa 1020

ttttgagatc cattaaaaaa gttaaatgag aaacctgtgt gttcctttgg tcaacaccga 1080

gacatttagg tgaaagcata tactgagatt gagattaact tcctgtgaaa cccagtgtct 1140

tagacaactg tggcttgagc accacctgtt ggtattcatt acaaacttgc tcactacaat 1200

aaatgaattt taagctttaa gatgaagtgg catttctttt aacagttact atgttggaat 1260

tggttacaaa ttttggagtg gactattgta tatatatatc agttactgtt atggatccca 1320

cgtcactatt gtatactcta tattatactc tatgttatac tctgtaatcc tactcaataa 1380

acgtgtcacg cctgtgaaac cgtactaagt ctcccgtgtc ttgttatcac catcaggtga 1440

catcctcgcc caggctgtca atcatgccgg tatcgattcc agtagcaccg gccccacgct 1500

gacaacccac tcttgcagcg ttagcagcgc ccctcttaac aagccgaccc ccaccagcgt 1560

cgcggttact aacactcctc tccccggggc atccgctact cccgagctcg aattcgttta 1620

tcggccaccg aggccaagat ctggccgcca acttacggta aatggcccgc ctggctgacc 1680

gcccaacgac ccccgcccat tgacgtcaat aatgacgtat gttcccatag taacgccaat 1740

agggactttc cattgacgtc aatgggtgga gtatttacgg taaactgccc acttggcagt 1800

acatcaagtg tatcatatgc caagtccgcc ccctattgac gtcaatgacg gtaaatggcc 1860

cgcctggcat tatgcccagt acatgacctt acgggacttt cctacttggc agtacatcta 1920

cgtattagtc atcgctatta ccaagtcatt gggtttttcc agccaattta taaaacgcca 1980

tgtactttcc caccattgac gtcaatgggc tattgaaact aatgcaacgt gacctttaaa 2040

cggtactttc ccatagctga ttaatgggaa agtaccgttc tcgagccaat acacgtcaat 2100

gggaagtgaa agggcagcca aaacgtaaca ccgccccggt tttcccctgg aaattccata 2160

ttggcacgca ttctattggc tgagctgcgt tctacgtggg tataagaggc gcgaccagcg 2220

tcggtaggga ccggtttgcc gccagaacac aggtgagggg cgggtgtggc ttccgcgggc 2280

cgccgagctg gaggtcctgc tccgagcggg ccgggccccg ctgtcgtcgg cggggattag 2340

ctgcgagcat tcccgcttcg agttgcgggc ggcgcgggag gcagagtgcg aggcctagcg 2400

gcaaccccgt agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgcgccgccg 2460

ccgcgtgcta ctccggccgc actctggtct ttttttttt tgttgttgtt gccctgctgc 2520

cttcgattgc cgttcagcaa taggggctaa caaagggagg gtgcggggct tgctcgcccg 2580

gagcccggag aggtcatggt tggggaggaa tggagggaca ggagtggcgg ctggggcccg 2640

cccgccttcg gagcacatgt ccgacgccac ctggatgggg cgaggcctgg ggtttttccc 2700

gaagcaacca ggctggggtt agcgtgccga ggccatgtgg ccccagcacc cggcacgatc 2760

tggcttggcg gcgccgcgtt gccctgcctc cctaactagg gtgaggccat cccgtccggc 2820

accagttgcg tgcgtggaaa gatggccgct cccgggccct gttgcaagga gctcaaaatg 2880

gaggacgcgg cagcccggtg gagcgggcgg gtgagtcacc cacacaaagg aagagggcct 2940

ggtccctcac cggctgctgc ttcctgtgac cccgtggtcc tatcggccgc aatagtcacc 3000

tcgggctttt gagcacggct agtcgcggcg gggggagggg atgtaatggc gttggagttt 3060

gttcacattt ggtgggtgga gactagtcag gccagcctgg cgctggaagt cattttgga 3120

atttgtcccc ttgagttttg agcggagcta attctcgggc ttcttagcgg ttcaaaggta 3180

tcttttaaac cctttttttag gtgttgtgaa aaccaccgct aattcaaagc aagccgccac 3240

c 3241

<210> 701
<211> 3095
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 701
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca actcccactg gttggggcat ttgcaccacc tgtcaactca tttccggtac 300

tttcggtttc tcacttccga ttgctaccgc ggagcttata gccgcctgcc ttgctcgctg 360

ctggacagga gctcggttgt tgggcactga taactccgtg gtcctctccg gtaagctaac 420

ttcgtttcca tggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcgtctgc cccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgcct gtatattatc cctaatactt gccaccccac tcttaatcag tggtggaaga 660

acggtgtcag aactgtttgt ttcaattggc catttaagtt tagtagtaaa agactggtta 720

atgataacaa tgcatcgtaa aaccttcaga aggaaaggag aatgttttgt ggaccacttt 780

ggttttcttt tttgcgtgtg gcagttttaa gttattagtt tttaaaatca gtacttttta 840

atggaaacaa cttgaccaaa aatttgtcac agaattttga gatccattaa aaaagttaaa 900

tgagaaacct gtgtgttcct ttggtcaaca ccgagacatt taggtgaaag catatactga 960

gattgagatt aacttcctgt gaaacccagt gtcttagaca actgtggctt gagcaccacc 1020

tgttggtatt cattacaaac ttgctcacta caataaatga attttaagct ttaagatgaa 1080

gtggcatttc ttttaacagt tactatgttg gaattggtta caaattttgg agtggactat 1140

tgtatatata tatcagttac tgttatggat cccacgtcac tattgtatac tctatattat 1200

actctatgtt atactctgta atcctactca ataaacgtgt cacgcctgtg aaaccgtact 1260

aagtctcccg tgtcttgtta tcaccatcag gtgacatcct cgcccaggct gtcaatcatg 1320

ccggtatcga ttccagtagc accggcccca cgctgacaac ccactcttgc agcgttagca 1380

gcgcccctct taacaagccg acccccacca gcgtcgcggt tactaacact cctctccccg 1440

gggcatccgc tactcccgag ctcgaattcg tttatcggcc accgaggcca agatctggcc 1500

gccaacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc ccattgacgt 1560

caataatgac gtatgttccc atagtaacgc caatagggac tttccattga cgtcaatggg 1620

tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagtc 1680

cgccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc cagtacatga 1740

ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccaagt 1800

cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat tgacgtcaat 1860

gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag ctgattaatg 1920

ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca gccaaaacgt 1980

aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat tggctgagct 2040

gcgttctacg tgggtataag aggcgcgacc agcgtcggta gggaccggtt tgccgccaga 2100

acacaggtga ggggcgggtg tggcttccgc gggccgccga gctggaggtc ctgctccgag 2160

cgggccgggc cccgctgtcg tcggcgggga ttagctgcga gcattcccgc ttcgagttgc 2220

gggcggcgcg ggaggcagag tgcgaggcct agcggcaacc ccgtagcctc gcctcgtgtc 2280

cggcttgagg cctagcgtgg tgtccgcgcc gccgccgcgt gctactccgg ccgcactctg 2340

gtctttttt tttttgttgt tgttgccctg ctgccttcga ttgccgttca gcaatagggg 2400

ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc ggagaggtca tggttgggga 2460

ggaatggagg gacaggagtg gcggctgggg cccgcccgcc ttcggagcac atgtccgacg 2520

ccacctggat ggggcgaggc ctggggtttt tcccgaagca accaggctgg ggttagcgtg 2580

ccgaggccat gtggccccag cacccggcac gatctggctt ggcggcgccg cgttgccctg 2640

cctccctaac tagggtgagg ccatcccgtc cggcaccagt tgcgtgcgtg gaaagatggc 2700

cgctcccggg ccctgttgca aggagctcaa aatggaggac gcggcagccc ggtggagcgg 2760

gcgggtgagt cacccacaca aaggaagagg gcctggtccc tcaccggctg ctgcttcctg 2820

tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc ttttgagcac ggctagtcgc 2880

ggcgggggga ggggatgtaa tggcgttgga gtttgttcac atttggtggg tggagactag 2940

tcaggccagc ctggcgctgg aagtcatttt tggaatttgt ccccttgagt tttgagcgga 3000

gctaattctc gggcttctta gcggttcaaa ggtatctttt aaaccctttt ttaggtgttg 3060

tgaaaaccac cgctaattca aagcaagccg ccacc 3095

<210> 702
<211> 3279
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 702
ccgcctagga ccaacatctt gagtcccttt atgccgctgt taccaatttt cttttgtctt 60

tgggtataca tttaaaccct aacaaaacaa aaagatgggg atattccctt aacttcatgg 120

gatatgtaat tgggagttgg ggcacatggc cacaggatca tattgtacaa aacttcaaac 180

tatgttttag aaaacttcct gttaatcaac ctctggatta caaaatttgt gaaagattga 240

ctggtattct taactatgtt gctcctttta cgctatgtgg atacgctgct ttaatgcctt 300

tgtatcatgc tattgcttcc cgtatggctt tcattttctc ctccttgtat aaatcctggt 360

tgctgtctct ttatgaggag ttgtggcccg ttgtcaggca acgtggcgtg gtgtgcactg 420

tgtttgctga cgcaaccccc actggttggg gcatttgcac cacctatcaa ctcatttccc 480

cgacgggcgc ttttgccctg ccgatcgcca ccgcggacgt catcgccgcc tgccttgctc 540

gctgctggac aggagctcgg ctgttgggca ctgacaactc cgtggttctt tcgggcaaac 600

tgacttccta tccatggctg ctcgcctgtg ttgccaactg gattcttcgc gggacgtcct 660

tctgttacgt cccctccgcg gacaacccag cggaccttcc ttcccgggga cttctgccgg 720

ctctccgtcc tctgccgctt ctgcgttttc gtccggtcac caagcggata tccctgtggg 780

ccgcctcccc gcctgtatat tatccctaat acttgccacc ccactcttaa tcagtggtgg 840

aagaacggtg tcagaactgt ttgtttcaat tggccattta agtttagtag taaaagactg 900

gttaatgata acaatgcatc gtaaaacctt cagaaggaaa ggagaatgtt ttgtggacca 960

ctttggtttt ctttttgcg tgtggcagtt ttaagttatt agtttttaaa atcagtactt 1020

tttaatggaa acaacttgac caaaaatttg tcacagaatt ttgagatcca ttaaaaaagt 1080

taaatgagaa acctgtgtgt tcctttggtc aacaccgaga catttaggtg aaagcatata 1140

ctgagattga gattaacttc ctgtgaaacc cagtgtctta gacaactgtg gcttgagcac 1200

cacctgttgg tattcattac aaacttgctc actacaataa atgaatttta agctttaaga 1260

tgaagtggca tttcttttaa cagttactat gttggaattg gttacaaatt ttggagtgga 1320

ctattgtata tatatatcag ttactgttat ggatcccacg tcactattgt atactctata 1380

ttatactcta tgttatactc tgtaatccta ctcaataaac gtgtcacgcc tgtgaaaccg 1440

tactaagtct cccgtgtctt gttatcacca tcaggtgaca tcctcgccca ggctgtcaat 1500

catgccggta tcgattccag tagcaccggc cccacgctga caacccactc ttgcagcgtt 1560

agcagcgccc ctcttaacaa gccgaccccc accagcgtcg cggttactaa cactcctctc 1620

cccggggcat ccgctactcc cgagctcgaa ttcgtttatc ggccaccgag gccaagatct 1680

ggccgccaac ttacggtaaa tggcccgcct ggctgaccgc ccaacgaccc ccgcccattg 1740

acgtcaataa tgacgtatgt tcccatagta acgccaatag ggactttcca ttgacgtcaa 1800

tgggtggagt atttacggta aactgcccac ttggcagtac atcaagtgta tcatatgcca 1860

agtccgcccc ctattgacgt caatgacggt aaatggcccg cctggcatta tgcccagtac 1920

atgaccttac gggactttcc tacttggcag tacatctacg tattagtcat cgctattacc 1980

aagtcattgg gtttttccag ccaatttata aaacgccatg tactttccca ccattgacgt 2040

caatgggcta ttgaaactaa tgcaacgtga cctttaaacg gtactttccc atagctgatt 2100

aatgggaaag taccgttctc gagccaatac acgtcaatgg gaagtgaaag ggcagccaaa 2160

acgtaacacc gccccggttt tcccctggaa attccatatt ggcacgcatt ctattggctg 2220

agctgcgttc tacgtgggta taagaggcgc gaccagcgtc ggtagggacc ggtttgccgc 2280

cagaacacag gtgaggggcg ggtgtggctt ccgcgggccg ccgagctgga ggtcctgctc 2340

cgagcgggcc gggccccgct gtcgtcggcg gggattagct gcgagcattc ccgcttcgag 2400

ttgcgggcgg cgcgggaggc agagtgcgag gcctagcggc aaccccgtag cctcgcctcg 2460

tgtccggctt gaggcctagc gtggtgtccg cgccgccgcc gcgtgctact ccggccgcac 2520

tctggtcttt ttttttttg ttgttgttgc cctgctgcct tcgattgccg ttcagcaata 2580

ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag gtcatggttg 2640

gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga gcacatgtcc 2700

gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg ctggggttag 2760

cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc gccgcgttgc 2820

cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga 2880

tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga 2940

gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg gctgctgctt 3000

cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga gcacggctag 3060

tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg tgggtggaga 3120

ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt gagttttgag 3180

cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc ttttttaggt 3240

gttgtgaaaa ccaccgctaa ttcaaagcaa gccgccacc 3279

<210> 703
<211> 3215
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 703
ccgcctagga cttccactca acaaaccttt agattataaa atctgtgaaa ggttaacagg 60

cattctgaat tatgttgctc cttttactaa atgtggttat gctgctctcc ttcctttgta 120

tcaagctact tcgcgtacgg catttgtgtt ttcttctctc taccacagct ggttgctgtc 180

cctttatgct gagttgtggc ctgttgccag gcaacgtggc gtggtgtgct ctgtgtctga 240

cgcaaccccc actggttggg gcatttgcac cacctatcaa ctcatttccc cgacgggcgc 300

ttttgccctg ccgatcgcca ccgcggacgt catcgccgcc tgccttgctc gctgctggac 360

aggagctcgg ctgttgggca ctgacaactc cgtggttctt tcgggcaaac tgacttccta 420

tccatggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacctg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgatattatc cctaatactt gccaccccac tcttaatcag tggtggaaga 780

acggtgtcag aactgtttgt ttcaattggc catttaagtt tagtagtaaa agactggtta 840

atgataacaa tgcatcgtaa aaccttcaga aggaaaggag aatgttttgt ggaccacttt 900

ggttttcttt tttgcgtgtg gcagttttaa gttattagtt tttaaaatca gtacttttta 960

atggaaacaa cttgaccaaa aatttgtcac agaattttga gatccattaa aaaagttaaa 1020

tgagaaacct gtgtgttcct ttggtcaaca ccgagacatt taggtgaaag catatactga 1080

gattgagatt aacttcctgt gaaacccagt gtcttagaca actgtggctt gagcaccacc 1140

tgttggtatt cattacaaac ttgctcacta caataaatga attttaagct ttaagatgaa 1200

gtggcatttc ttttaacagt tactatgttg gaattggtta caaattttgg agtggactat 1260

tgtatatata tatcagttac tgttatggat cccacgtcac tattgtatac tctatattat 1320

actctatgtt atactctgta atcctactca ataaacgtgt cacgcctgtg aaaccgtact 1380

aagtctcccg tgtcttgtta tcaccatcag gtgacatcct cgcccaggct gtcaatcatg 1440

ccggtatcga ttccagtagc accggcccca cgctgacaac ccactcttgc agcgttagca 1500

gcgcccctct taacaagccg acccccacca gcgtcgcggt tactaacact cctctccccg 1560

gggcatccgc tactcccgag ctcgaattcg tttatcggcc accgaggcca agatctggcc 1620

gccaacttac ggtaaatggc ccgcctggct gaccgcccaa cgacccccgc ccattgacgt 1680

caataatgac gtatgttccc atagtaacgc caatagggac tttccattga cgtcaatggg 1740

tggagtattt acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagtc 1800

cgcccccctat tgacgtcaat gacggtaaat ggcccgcctg gcattatgcc cagtacatga 1860

ccttacggga ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccaagt 1920

cattgggttt ttccagccaa tttataaaac gccatgtact ttcccaccat tgacgtcaat 1980

gggctattga aactaatgca acgtgacctt taaacggtac tttcccatag ctgattaatg 2040

ggaaagtacc gttctcgagc caatacacgt caatgggaag tgaaagggca gccaaaacgt 2100

aacaccgccc cggttttccc ctggaaattc catattggca cgcattctat tggctgagct 2160

gcgttctacg tgggtataag aggcgcgacc agcgtcggta gggaccggtt tgccgccaga 2220

acacaggtga ggggcgggtg tggcttccgc gggccgccga gctggaggtc ctgctccgag 2280

cgggccgggc cccgctgtcg tcggcgggga ttagctgcga gcattcccgc ttcgagttgc 2340

gggcggcgcg ggaggcagag tgcgaggcct agcggcaacc ccgtagcctc gcctcgtgtc 2400

cggcttgagg cctagcgtgg tgtccgcgcc gccgccgcgt gctactccgg ccgcactctg 2460

gtctttttt tttttgttgt tgttgccctg ctgccttcga ttgccgttca gcaatagggg 2520

ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc ggagaggtca tggttgggga 2580

ggaatggagg gacaggagtg gcggctgggg cccgcccgcc ttcggagcac atgtccgacg 2640

ccacctggat ggggcgaggc ctggggtttt tcccgaagca accaggctgg ggttagcgtg 2700

ccgaggccat gtggccccag cacccggcac gatctggctt ggcggcgccg cgttgccctg 2760

cctccctaac tagggtgagg ccatcccgtc cggcaccagt tgcgtgcgtg gaaagatggc 2820

cgctcccggg ccctgttgca aggagctcaa aatggaggac gcggcagccc ggtggagcgg 2880

gcgggtgagt cacccacaca aaggaagagg gcctggtccc tcaccggctg ctgcttcctg 2940

tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc ttttgagcac ggctagtcgc 3000

ggcgggggga ggggatgtaa tggcgttgga gtttgttcac atttggtggg tggagactag 3060

tcaggccagc ctggcgctgg aagtcatttt tggaatttgt ccccttgagt tttgagcgga 3120

gctaattctc gggcttctta gcggttcaaa ggtatctttt aaaccctttt ttaggtgttg 3180

tgaaaaccac cgctaattca aagcaagccg ccacc 3215

<210> 704
<211> 3279
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 704
ccgcctagga cgagcatctt accgccattt attcccatat ttgctctgtt tttcttgatt 60

tgggcataca tttaaatgta gccaaaacta aatggtgggg acatcattta catttcatgg 120

gttatgttat tactggagca ggaattttac cccaagataa acatgtgcaa aaagtatcaa 180

catatttgaa atccattcct gtaaacaggc ctattgattg gaaagtttgt caacgaattg 240

tgggtctttt ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt 300

tatatgcatg tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc 360

tcagtaaaca gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag 420

tgtttgctga cgcaactccc actggttggg gcatttgcac cacctgtcaa ctcatttccg 480

gtactttcgg tttctcactt ccgattgcta ccgcggagct tatagccgcc tgccttgctc 540

gctgctggac aggagctcgg ttgttgggca ctgataactc cgtggtcctc tccggtaagc 600

taacttcgtt tccatggctg ctcgcctgtg ttgccaactg gattcttcgc gggacgtcgt 660

tctgctacgt cccttcggca gcgaatccgg cggaccttcc ttcccgaggc cttctgccgg 720

ctctgcatcc cgtgccgact ctccgcttcc gtccgcagct gagtcgcatc tccctttggg 780

ccgcctcccc gcctgtatat tatccctaat acttgccacc ccactcttaa tcagtggtgg 840

aagaacggtg tcagaactgt ttgtttcaat tggccattta agtttagtag taaaagactg 900

gttaatgata acaatgcatc gtaaaacctt cagaaggaaa ggagaatgtt ttgtggacca 960

ctttggtttt ctttttgcg tgtggcagtt ttaagttatt agtttttaaa atcagtactt 1020

tttaatggaa acaacttgac caaaaatttg tcacagaatt ttgagatcca ttaaaaaagt 1080

taaatgagaa acctgtgtgt tcctttggtc aacaccgaga catttaggtg aaagcatata 1140

ctgagattga gattaacttc ctgtgaaacc cagtgtctta gacaactgtg gcttgagcac 1200

cacctgttgg tattcattac aaacttgctc actacaataa atgaatttta agctttaaga 1260

tgaagtggca tttcttttaa cagttactat gttggaattg gttacaaatt ttggagtgga 1320

ctattgtata tatatatcag ttactgttat ggatcccacg tcactattgt atactctata 1380

ttatactcta tgttatactc tgtaatccta ctcaataaac gtgtcacgcc tgtgaaaccg 1440

tactaagtct cccgtgtctt gttatcacca tcaggtgaca tcctcgccca ggctgtcaat 1500

catgccggta tcgattccag tagcaccggc cccacgctga caacccactc ttgcagcgtt 1560

agcagcgccc ctcttaacaa gccgaccccc accagcgtcg cggttactaa cactcctctc 1620

cccggggcat ccgctactcc cgagctcgaa ttcgtttatc ggccaccgag gccaagatct 1680

ggccgccaac ttacggtaaa tggcccgcct ggctgaccgc ccaacgaccc ccgcccattg 1740

acgtcaataa tgacgtatgt tcccatagta acgccaatag ggactttcca ttgacgtcaa 1800

tgggtggagt atttacggta aactgcccac ttggcagtac atcaagtgta tcatatgcca 1860

agtccgcccc ctattgacgt caatgacggt aaatggcccg cctggcatta tgcccagtac 1920

atgaccttac gggactttcc tacttggcag tacatctacg tattagtcat cgctattacc 1980

aagtcattgg gtttttccag ccaatttata aaacgccatg tactttccca ccattgacgt 2040

caatgggcta ttgaaactaa tgcaacgtga cctttaaacg gtactttccc atagctgatt 2100

aatgggaaag taccgttctc gagccaatac acgtcaatgg gaagtgaaag ggcagccaaa 2160

acgtaacacc gccccggttt tcccctggaa attccatatt ggcacgcatt ctattggctg 2220

agctgcgttc tacgtgggta taagaggcgc gaccagcgtc ggtagggacc ggtttgccgc 2280

cagaacacag gtgaggggcg ggtgtggctt ccgcgggccg ccgagctgga ggtcctgctc 2340

cgagcgggcc gggccccgct gtcgtcggcg gggattagct gcgagcattc ccgcttcgag 2400

ttgcgggcgg cgcgggaggc agagtgcgag gcctagcggc aaccccgtag cctcgcctcg 2460

tgtccggctt gaggcctagc gtggtgtccg cgccgccgcc gcgtgctact ccggccgcac 2520

tctggtcttt ttttttttg ttgttgttgc cctgctgcct tcgattgccg ttcagcaata 2580

ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag gtcatggttg 2640

gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga gcacatgtcc 2700

gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg ctggggttag 2760

cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc gccgcgttgc 2820

cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga 2880

tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga 2940

gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg gctgctgctt 3000

cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga gcacggctag 3060

tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg tgggtggaga 3120

ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt gagttttgag 3180

cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc ttttttaggt 3240

gttgtgaaaa ccaccgctaa ttcaaagcaa gccgccacc 3279

<210> 705
<211> 3273
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 705
ccgcctagga ccaacatctt gagtcccttt atgccgctgt taccaatttt cttttgtctt 60

tgggtataca tttaaaccct aacaaaacaa aaagatgggg atattccctt aacttcatgg 120

gatatgtaat tgggagttgg ggcacatggc cacaggatca tattgtacaa aacttcaaac 180

tatgttttag aaaacttcca ctcaacaaac ctttagatta taaaatctgt gaaaggttaa 240

caggcattct gaattatgtt gctcctttta ctaaatgtgg ttatgctgct ctccttcctt 300

tgtatcaagc tacttcgcgt acggcatttg tgttttcttc tctctaccac agctggttgc 360

tgtcccttta tgctgagttg tggcctgttg ccaggcaacg tggcgtggtg tgctctgtgt 420

ctgacgcaac ccccactggt tggggcttgg ccataggcca tcagcgcatg cgtggaacct 480

ttgtgtctcc tctgccgatc catactgcgg aactcctagc cgcttgtttt gctcgcagct 540

ggactggagc aaacctcatc gggaccgaca attctgtcgt actctcccgc aagtatacat 600

cgtttccatg gctgctcgcc tgtgttgcca actggattct tcgcgggacg tcgttctgct 660

acgtcccttc ggcagcgaat ccggcggacc ttccttcccg aggccttctg ccggctctgc 720

atcccgtgcc gactctccgc ttccgtccgc agctgagtcg catctccctt tgggccgcct 780

ccccgcctgt atattatccc taatacttgc caccccactc ttaatcagtg gtggaagaac 840

ggtgtcagaa ctgtttgttt caattggcca tttaagttta gtagtaaaag actggttaat 900

gataacaatg catcgtaaaa ccttcagaag gaaaggagaa tgttttgtgg accactttgg 960

ttttcttttt tgcgtgtggc agttttaagt tattagtttt taaaatcagt acttttaat 1020

ggaaacaact tgaccaaaaa tttgtcacag aattttgaga tccattaaaa aagttaaatg 1080

agaaacctgt gtgttccttt ggtcaacacc gagacattta ggtgaaagca tatactgaga 1140

ttgagattaa cttcctgtga aacccagtgt cttagacaac tgtggcttga gcaccacctg 1200

ttggtattca ttacaaactt gctcactaca ataaatgaat tttaagcttt aagatgaagt 1260

ggcatttctt ttaacagtta ctatgttgga attggttaca aattttggag tggactattg 1320

tatatatata tcagttactg ttatggatcc cacgtcacta ttgtatactc tatattatac 1380

tctatgttat actctgtaat cctactcaat aaacgtgtca cgcctgtgaa accgtactaa 1440

gtctcccgtg tcttgttatc accatcaggt gacatcctcg cccaggctgt caatcatgcc 1500

ggtatcgatt ccagtagcac cggccccacg ctgacaaccc actcttgcag cgttagcagc 1560

gcccctctta acaagccgac ccccaccagc gtcgcggtta ctaacactcc tctccccggg 1620

gcatccgcta ctcccgagct cgaattcgtt tatcggccac cgaggccaag atctggccgc 1680

caacttacgg taaatggccc gcctggctga ccgcccaacg acccccgccc attgacgtca 1740

ataatgacgt atgttcccat agtaacgcca atagggactt tccattgacg tcaatgggtg 1800

gagtatttac ggtaaactgc ccacttggca gtacatcaag tgtatcatat gccaagtccg 1860

ccccctattg acgtcaatga cggtaaatgg cccgcctggc attatgccca gtacatgacc 1920

ttacgggact ttcctacttg gcagtacatc tacgtattag tcatcgctat taccaagtca 1980

ttgggttttt ccagccaatt tataaaacgc catgtacttt cccaccattg acgtcaatgg 2040

gctattgaaa ctaatgcaac gtgaccttta aacggtactt tcccatagct gattaatggg 2100

aaagtaccgt tctcgagcca atacacgtca atgggaagtg aaagggcagc caaaacgtaa 2160

caccgccccg gttttcccct ggaaattcca tattggcacg cattctattg gctgagctgc 2220

gttctacgtg ggtataagag gcgcgaccag cgtcggtagg gaccggtttg ccgccagaac 2280

acaggtgagg ggcgggtgtg gcttccgcgg gccgccgagc tggaggtcct gctccgagcg 2340

ggccgggccc cgctgtcgtc ggcggggatt agctgcgagc attcccgctt cgagttgcgg 2400

gcggcgcggg aggcagagtg cgaggcctag cggcaacccc gtagcctcgc ctcgtgtccg 2460

gcttgaggcc tagcgtggtg tccgcgccgc cgccgcgtgc tactccggcc gcactctggt 2520

ctttttttt tttgttgttg ttgccctgct gccttcgatt gccgttcagc aataggggct 2580

aacaaaggga gggtgcgggg cttgctcgcc cggagcccgg agaggtcatg gttggggagg 2640

aatggaggga caggagtggc ggctggggcc cgcccgcctt cggagcacat gtccgacgcc 2700

acctggatgg ggcgaggcct ggggtttttc ccgaagcaac caggctgggg ttagcgtgcc 2760

gaggccatgt ggccccagca cccggcacga tctggcttgg cggcgccgcg ttgccctgcc 2820

tccctaacta gggtgaggcc atcccgtccg gcaccagttg cgtgcgtgga aagatggccg 2880

ctcccgggcc ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg tggagcgggc 2940

gggtgagtca cccacacaaa ggaagagggc ctggtccctc accggctgct gcttcctgtg 3000

accccgtggt cctatcggcc gcaatagtca cctcgggctt ttgagcacgg ctagtcgcgg 3060

cgggggggagg ggatgtaatg gcgttggagt ttgttcacat ttggtgggtg gagactagtc 3120

aggccagcct ggcgctggaa gtcatttttg gaatttgtcc ccttgagttt tgagcggagc 3180

taattctcgg gcttcttagc ggttcaaagg tatcttttaa accctttttt aggtgttgtg 3240

aaaaccaccg ctaattcaaa gcaagccgcc acc 3273

<210> 706
<211> 1686
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 706
gagcatctta ccgccattta ttcccatatt tgctctgttt ttcttgattt gggcatacat 60

ttaaatgtag ccaaaactaa atggtgggga catcatttac atttcatggg ttatgttatt 120

actggagcag gaattttacc ccaagataaa catgtgcaaa aagtatcaac atatttgaaa 180

tccattcctg taaacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg 240

gggtttgctg ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt 300

atacaagcaa aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag 360

tatatgaccc tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac 420

gcaactccca ctggttgggg catttgcacc acctgtcaac tcatttccgg tactttcggt 480

ttctcacttc cgattgctac cgcggagctt atagccgcct gccttgctcg ctgctggaca 540

ggagctcggt tgttgggcac tgataactcc gtggtcctct ccggtaagct aacttcgttt 600

ccatggctgc tcgcctgtgt tgccaactgg attcttcgcg ggacgtcgtt ctgctacgtc 660

ccttcggcag cgaatccggc ggaccttcct tcccgaggcc ttctgccggc tctgcatccc 720

gtgccgactc tccgcttccg tccgcagctg agtcgcatct ccctttgggc cgcctccccg 780

cctgttgtat actctatatt atactctatg ttatactctg taatcctact caataaacgt 840

gtcacgcctg tgaaaccgta ctaagtctcc cgtgtcttct tatcaccatc aggtgacatc 900

ctcgcccagg ctgtcaatca tgccggtatc gattccagta gcaccggccc cacgctgaca 960

acccactctt gcagcgttag cagcgcccct cttaacaagc cgacccccac cagcgtcgcg 1020

gttactaaca ctcctctccc cggggcatcc gctactcccg agctcggccg ccatatactg 1080

agtcattagg gactttccaa tgggttttgc ccagtacata aggtcaatag gggtgaatca 1140

acaggaaagt cccattggag ccaagtacac tgagtcaata gggactttcc attgggtttt 1200

gcccagtaca aaaggtcaat agggggtgag tcaatgggtt tttcccatta ttggcacgta 1260

cataaggtca ataggggtga gtcattgggt ttttccagcc aatttataaa acgccatgta 1320

ctttcccacc attgacgtca atgggctatt gaaactaatg caacgtgacc tttaaacggt 1380

actttcccat agctgattaa tgggaaagta ccgttctcga gccaatacac gtcaatggga 1440

agtgaaaggg cagccaaaac gtaacaccgc cccggttttc ccctggaaat tccatattgg 1500

cacgcattct attggctgag ctgcgttcta cgtgggtata agaggcgcga ccagcgtcgg 1560

taccgtcgca gtcttgggtc tgaccaccgt agaacgcaga gctcctcgct gcagtatcct 1620

gcccaagaaa gagcgacccg tctcaggggc ttcgcaggta cacccaagct gtctagagcc 1680

gccacc 1686

<210> 707
<211> 1680
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 707
caacatcttg agtcccttta tgccgctgtt accaattttc ttttgtcttt gggtatacat 60

ttaaacccta acaaaacaaa aagatgggga tattccctta acttcatggg atatgtaatt 120

gggagttggg gcacatggcc acaggatcat attgtacaaa acttcaaact atgttttaga 180

aaacttccac tcaacaaacc tttagattat aaaatctgtg aaaggttaac aggcattctg 240

aattatgttg ctccttttac taaatgtggt tatgctgctc tccttccttt gtatcaagct 300

acttcgcgta cggcatttgt gttttcttct ctctaccaca gctggttgct gtccctttat 360

gctgagttgt ggcctgttgc caggcaacgt ggcgtggtgt gctctgtgtc tgacgcaacc 420

cccactggtt ggggcttggc cataggccat cagcgcatgc gtggaacctt tgtgtctcct 480

ctgccgatcc atactgcgga actcctagcc gcttgttttg ctcgcagctg gactggagca 540

aacctcatcg ggaccgacaa ttctgtcgta ctctcccgca agtatacatc gtttccatgg 600

ctgctcgcct gtgttgccaa ctggattctt cgcgggacgt cgttctgcta cgtcccttcg 660

gcagcgaatc cggcggacct tccttcccga ggccttctgc cggctctgca tcccgtgccg 720

actctccgct tccgtccgca gctgagtcgc atctcccttt gggccgcctc cccgcctgtt 780

gtatactcta tattatactc tatgttatac tctgtaatcc tactcaataa acgtgtcacg 840

cctgtgaaac cgtactaagt ctcccgtgtc ttcttatcac catcaggtga catcctcgcc 900

caggctgtca atcatgccgg tatcgattcc agtagcaccg gccccacgct gacaacccac 960

tcttgcagcg ttagcagcgc ccctcttaac aagccgaccc ccaccagcgt cgcggttact 1020

aacactcctc tccccggggc atccgctact cccgagctcg gccgccatat actgagtcat 1080

tagggacttt ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga 1140

aagtcccatt ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag 1200

tacaaaaggt caatagggggg tgagtcaatg ggtttttccc attattggca cgtacataag 1260

gtcaataggg gtgagtcatt gggtttttcc agccaattta taaaacgcca tgtactttcc 1320

caccattgac gtcaatgggc tattgaaact aatgcaacgt gacctttaaa cggtactttc 1380

ccatagctga ttaatgggaa agtaccgttc tcgagccaat acacgtcaat gggaagtgaa 1440

agggcagcca aaacgtaaca ccgccccggt tttcccctgg aaattccata ttggcacgca 1500

ttctattggc tgagctgcgt tctacgtggg tataagaggc gcgaccagcg tcggtaccgt 1560

cgcagtcttg ggtctgacca ccgtagaacg cagagctcct cgctgcagta tcctgcccaa 1620

gaaagagcga cccgtctcag gggcttcgca ggtacaccca agctgtctag agccgccacc 1680

<210> 708
<211> 3235

<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 708
gagcatctta ccgccattta ttcccatatt tgctctgttt ttcttgattt gggcatacat 60

ttaaatgtag ccaaaactaa atggtgggga catcatttac atttcatggg ttatgttatt 120

actggagcag gaattttacc ccaagataaa catgtgcaaa aagtatcaac atatttgaaa 180

tccattcctg taaacaggcc tattgattgg aaagtttgtc aacgaattgt gggtcttttg 240

gggtttgctg ccccttttac gcaatgtgga tatcctgctt taatgccttt atatgcatgt 300

atacaagcaa aacaggcttt tactttctcg ccaacttaca aggcctttct cagtaaacag 360

tatatgaccc tttaccccgt tgctcggcaa cggcctggtc tgtgccaagt gtttgctgac 420

gcaactccca ctggttgggg catttgcacc acctgtcaac tcatttccgg tactttcggt 480

ttctcacttc cgattgctac cgcggagctt atagccgcct gccttgctcg ctgctggaca 540

ggagctcggt tgttgggcac tgataactcc gtggtcctct ccggtaagct aacttcgttt 600

ccatggctgc tcgcctgtgt tgccaactgg attcttcgcg ggacgtcgtt ctgctacgtc 660

ccttcggcag cgaatccggc ggaccttcct tcccgaggcc ttctgccggc tctgcatccc 720

gtgccgactc tccgcttccg tccgcagctg agtcgcatct ccctttgggc cgcctccccg 780

cctgtatcgg gggaggctaa ctgaaacacg gaaggagaca ataccggaag gaacccgcgc 840

tatgacggca ataaaaagac agaataaaac gcacgggtgt tgggtcgttt gttcataaac 900

gcggggttcg gtcccagggc tggcactctg tcgatacccc accgagtccc cattggggcc 960

aatacgcccg cgtttcttcc ttttccccac cccacccccc aagttcgggt gaaggcccag 1020

ggctcgcagc caacgtcggg gcggcaggcc ctgccataga aatcgataat atatggtagg 1080

gttcatagcc agagtaacct tttttttaa tttttatttt attttatttt tgagtcgggc 1140

gcgccaaaat gaagtgaagt tcctatactt tctagagcga gctcacgggg acagcccccc 1200

cccaaagccc ccagggatgt aattacgtcc ctcccccgct agggggcagc agcgagccgc 1260

ccggggctcc gctccggtcc ggcgctcccc ccgcatcccc gagccggcag cgtgcgggga 1320

cagcccgggc acggggaagg tggcacggga tcgctttcct ctgaacgctt ctcgctgctc 1380

tttgagcctg cagacacctg gggggatacg gggaaaaagc tttaggctga aagagagatt 1440

tagaatgaca ggcgagctca cggggacagc ccccccccaa agcccccagg gatgtaatta 1500

cgtccctccc ccgctagggg gcagcagcga gccgcccggg gctccgctcc ggtccggcgc 1560

tccccccgca tccccgagcc ggcagcgtgc ggggacagcc cgggcacggg gaaggtggca 1620

cgggatcgct ttcctctgaa cgcttctcgc tgctctttga gcctgcagac acctgggggg 1680

atacggggaa aaagcttgaa acttgatctg tcgccgcaat tcaagcttcg tgaggctccg 1740

gtgcccgtca gtgacctgct atactctgga gacgagcggg gctgacgtcg ggaggtggcc 1800

tccgtgggaa gggacacccg gatcttgaca cagccttggc agcggagtaa ggaagagtag 1860

ggatagattc tggccgccct cttggccagc ttctcgccgc cccaccctcc gctagggcca 1920

agagtaattc atacaaaagg agggatcgcc ttcgcaaggg gagagcccag ggaccgtccc 1980

taaattctca cagacccaaa tccctgtagc cgccccacga cagcgcgagg agcatgcgct 2040

cagggctgag cgcggggaga gcagagcaca caagctcata gaccctggtc gtgggggggа 2100

ggaccgggga gctggcgcgg ggcaaactgg gaaagcggtg tcgtgtgctg gctccgccct 2160

cttcccgagg gtgggggaga acggtatata agtgcggcag tcgccttgga cgttcttttt 2220

cgcaacgggt ttgccgtcag aacgcaggtg aggggcgggt gtggcttccg cgggccgccg 2280

agctggaggt cctgctccga gcgggccggg ccccgctgtc gtcggcgggg attagctgcg 2340

agcattcccg cttcgagttg cgggcggcgc gggaggcaga gtgcgaggcc tagcggcaac 2400

cccgtagcct cgcctcgtgt ccggcttgag gcctagcgtg gtgtccgcgc cgccgccgcg 2460

tgctactccg gccgcactct ggtctttttt tttttgttgt tgttgccctg ctgccttcga 2520

ttgccgttca gcaatagggg ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc 2580

ggagaggtca tggttgggga ggaatggagg gacaggagtg gcggctgggg cccgcccgcc 2640

ttcggagcac atgtccgacg ccacctggat ggggcgaggc ctggggtttt tcccgaagca 2700

accaggctgg ggttagcgtg ccgaggccat gtggccccag cacccggcac gatctggctt 2760

ggcggcgccg cgttgccctg cctccctaac tagggtgagg ccatcccgtc cggcaccagt 2820

tgcgtgcgtg gaaagatggc cgctcccggg ccctgttgca aggagctcaa aatggaggac 2880

gcggcagccc ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gcctggtccc 2940

tcaccggctg ctgcttcctg tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc 3000

ttttgagcac ggctagtcgc ggcgggggga ggggatgtaa tggcgttgga gtttgttcac 3060

atttggtggg tggagactag tcaggccagc ctggcgctgg aagtcatttt tggaatttgt 3120

ccccttgagt tttgagcgga gctaattctc gggcttctta gcggttcaaa ggtatctttt 3180

aaaccctttt ttaggtgttg tgaaaaccac cgctaattca aagcaagccg ccacc 3235

<210> 709
<211> 3229
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 709
caacatcttg agtcccttta tgccgctgtt accaattttc ttttgtcttt gggtatacat 60

ttaaacccta acaaaacaaa aagatgggga tattccctta acttcatggg atatgtaatt 120

gggagttggg gcacatggcc acaggatcat attgtacaaa acttcaaact atgttttaga 180

aaacttccac tcaacaaacc tttagattat aaaatctgtg aaaggttaac aggcattctg 240

aattatgttg ctccttttac taaatgtggt tatgctgctc tccttccttt gtatcaagct 300

acttcgcgta cggcatttgt gttttcttct ctctaccaca gctggttgct gtccctttat 360

gctgagttgt ggcctgttgc caggcaacgt ggcgtggtgt gctctgtgtc tgacgcaacc 420

cccactggtt ggggcttggc cataggccat cagcgcatgc gtggaacctt tgtgtctcct 480

ctgccgatcc atactgcgga actcctagcc gcttgttttg ctcgcagctg gactggagca 540

aacctcatcg ggaccgacaa ttctgtcgta ctctcccgca agtatacatc gtttccatgg 600

ctgctcgcct gtgttgccaa ctggattctt cgcgggacgt cgttctgcta cgtcccttcg 660

gcagcgaatc cggcggacct tccttcccga ggccttctgc cggctctgca tcccgtgccg 720

actctccgct tccgtccgca gctgagtcgc atctcccttt gggccgcctc cccgcctgta 780

tcgggggagg ctaactgaaa cacggaagga gacaataccg gaaggaaccc gcgctatgac 840

ggcaataaaa agacagaata aaacgcacgg gtgttgggtc gtttgttcat aaacgcgggg 900

ttcggtccca gggctggcac tctgtcgata ccccaccgag tccccattgg ggccaatacg 960

cccgcgtttc ttccttttcc ccaccccacc ccccaagttc gggtgaaggc ccagggctcg 1020

cagccaacgt cggggcggca ggccctgcca tagaaatcga taatatatgg tagggttcat 1080

agccagagta acctttttt ttaattttta ttttatttta tttttgagtc gggcgcgcca 1140

aaatgaagtg aagttcctat actttctaga gcgagctcac ggggacagcc ccccccccaaa 1200

gcccccaggg atgtaattac gtccctcccc cgctaggggg cagcagcgag ccgcccgggg 1260

ctccgctccg gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg gggacagccc 1320

gggcacgggg aaggtggcac gggatcgctt tcctctgaac gcttctcgct gctctttgag 1380

cctgcagaca cctgggggga tacggggaaa aagctttagg ctgaaagaga gatttagaat 1440

gacaggcgag ctcacgggga cagcccccc ccaaagcccc cagggatgta attacgtccc 1500

tcccccgcta gggggcagca gcgagccgcc cggggctccg ctccggtccg gcgctccccc 1560

cgcatccccg agccggcagc gtgcggggac agcccgggca cggggaaggt ggcacgggat 1620

cgctttcctc tgaacgcttc tcgctgctct ttgagcctgc agacacctgg ggggatacgg 1680

ggaaaaagct tgaaacttga tctgtcgccg caattcaagc ttcgtgaggc tccggtgccc 1740

gtcagtgacc tgctatactc tggagacgag cggggctgac gtcgggaggt ggcctccgtg 1800

ggaagggaca cccggatctt gacacagcct tggcagcgga gtaaggaaga gtagggatag 1860

attctggccg ccctcttggc cagcttctcg ccgccccacc ctccgctagg gccaagagta 1920

attcatacaa aaggagggat cgccttcgca aggggagagc ccagggaccg tccctaaatt 1980

ctcacagacc caaatccctg tagccgcccc acgacagcgc gaggagcatg cgctcagggc 2040

tgagcgcggg gagagcagag cacacaagct catagaccct ggtcgtgggg gggaggaccg 2100

gggagctggc gcggggcaaa ctgggaaagc ggtgtcgtgt gctggctccg ccctcttccc 2160

gagggtgggg gagaacggta tataagtgcg gcagtcgcct tggacgttct ttttcgcaac 2220

gggtttgccg tcagaacgca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg 2280

aggtcctgct ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt 2340

cccgcttcga gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta 2400

gcctcgcctc gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac 2460

tccggccgca ctctggtctt ttttttttg ttgttgttgc cctgctgcct tcgattgccg 2520

ttcagcaata ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag 2580

gtcatggttg gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga 2640

gcacatgtcc gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg 2700

ctggggttag cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc 2760

gccgcgttgc cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg 2820

cgtggaaaga tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca 2880

gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg 2940

gctgctgctt cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga 3000

gcacggctag tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg 3060

tgggtggaga ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt 3120

gagttttgag cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc 3180

ttttttaggt gttgtgaaaa ccaccgctaa ttcaaagcaa gccgccacc 3229

<210> 710
<211> 2184
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 710
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaagcggggc tgacgtcggg aggtggcctc cgtgggaagg 720

gacacccgga tcttgacaca gccttggcag cggagtaagg aagagtaggg atagattctg 780

gccgccctct tggccagctt ctcgccgccc caccctccgc tagggccaag agtaattcat 840

acaaaaggag ggatcgcctt cgcctgggga agtcccaggg accgtcgcta aattctcata 900

acccataatc ccggtacccg ccccaccaca gtgcgaggag catgcgctca gggctgagcg 960

cggggagagc agagcacaca agctcataga ccctggtcgt gggggggaggg gcgcactgag 1020

cgggggggggg gggggtgatg gggggggagga ccggggagct ggcgcggggc aaactgggaa 1080

agcggtgtcg tgtgctggct ccgccctctt cccgagggtg ggggagaacg gtatataagt 1140

gcggcagtcg ccttggacgt tccttttttcg caacgggttt gccgtcagaa cgcaggtgag 1200

gggcgggtgt ggcttccgcg ggccgccgag ctggaggtcc tgctccgagc gggccgggcc 1260

ccgctgtcgt cggcggggat tagctgcgag cattcccgct tcgagttgcg ggcggcgcgg 1320

gaggcagagt gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc ggcttgaggc 1380

ctagcgtggt gtccgcgccg ccgccgcgtg ctactccggc cgcactctgg tctttttttt 1440

ttttgttgtt gttgccctgc tgccttcgat tgccgttcag caataggggc taacaaaggg 1500

agggtgcggg gcttgctcgc ccggagcccg gagaggtcat ggttggggag gaatggaggg 1560

acaggagtgg cggctggggc ccgcccgcct tcggagcaca tgtccgacgc cacctggatg 1620

gggcgaggcc tggggttttt cccgaagcaa ccaggctggg gttagcgtgc cgaggccatg 1680

tggccccagc acccggcacg atctggcttg gcggcgccgc gttgccctgc ctccctaact 1740

agggtgaggc catcccgtcc ggcaccagtt gcgtgcgtgg aaagatggcc gctcccgggc 1800

cctgttgcaa ggagctcaaa atggaggacg cggcagcccg gtggagcggg cgggtgagtc 1860

acccacacaa aggaagaggg cctggtccct caccggctgc tgcttcctgt gaccccgtgg 1920

tcctatcggc cgcaatagtc acctcgggct tttgagcacg gctagtcgcg gcgggggggag 1980

gggatgtaat ggcgttggag tttgttcaca tttggtgggt ggagactagt caggccagcc 2040

tggcgctgga agtcattttt ggaatttgtc cccttgagtt ttgagcggag ctaattctcg 2100

ggcttcttag cggttcaaag gtatctttta aaccctttt taggtgttgt gaaaaccacc 2160

gctaattcaa agcaagccgc cacc 2184

<210> 711
<211> 2848
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 711
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cgagacggac ggtagcatcc 960

ttaggatcga gtcaatggga aaaacccatt ggagccaagt acactgactc aatagggact 1020

ttccattggg ttttgcccag tacataaggt caatagggggg tgagtcaaca ggaaagtccc 1080

attggagcca agtacattga gtcaataggg actttccaat gggttttgcc cagtacataa 1140

ggtcaatggg aggtaagcca atgggttttt cccattactg acatgtatac tgagtcatta 1200

gggactttcc aatgggtttt gcccagtaca taaggtcaat aggggtgaat caacaggaaa 1260

gtcccattgg agccaagtac actgagtcaa tagggacttt ccattgggtt ttgcccagta 1320

caaaaggtca atagggggtg agtcaatggg tttttcccat tattggcacg tacataaggt 1380

caataggggt gagtcattgg gtttttccag ccaatttata aaacgccatg tactttccca 1440

ccattgacgt caatgggcta ttgaaactaa tgcaacgtga cctttaaacg gtactttccc 1500

atagctgatt aatgggaaag taccgttctc gagccaatac acgtcaatgg gaagtgaaag 1560

ggcagccaaa acgtaacacc gccccggttt tcccctggaa attccatatt ggcacgcatt 1620

ctattggctg agctgcgttc tacgtgggta tataagcaga gctctcccta tcagtgatag 1680

agatctccct atcagtgata gagatcgtcg acgagctcag cgtcggtacc gtacctcttc 1740

cgcatcgctg tctgcgaggg ccagctgttg gggtgagtgg cgggtgtggc ttccgcgggc 1800

cccggagctg gagccctgct ctgagcgggc cgggctgata tgcgagtgtc gtccgcaggg 1860

tttagctgtg agcattccca cttcgagtgg cgggcggtgc gggggtgaga gtgcgaggcc 1920

tagcggcaac cccgtagcct cgcctcgtgt ccggcttgag gcctagcgtg gtgtccgccg 1980

ccgcgtgcca ctccggccgc actatgcgtt ttttgtcctt gctgccctcg attgccttcc 2040

agcagcatgg gctaacaaag ggagggtgtg gggctcactc ttaaggagcc catgaagctt 2100

acgttggata ggaatggaag ggcaggaggg gcgactgggg cccgcccgcc ttcggagcac 2160

atgtccgacg ccacctggat ggggcgaggc ctgtggcttt ccgaagcaat cgggcgtgag 2220

tttagcctac ctgggccatg tggccctagc actgggcacg gtctggcctg gcggtgccgc 2280

gttcccttgc ctcccaacaa gggtgaggcc gtcccgcccg gcaccagttg cttgcgcgga 2340

aagatggccg ctcccggggc cctgttgcaa ggagctcaaa atggaggacg cggcagcccg 2400

gtggagcggg cgggtgagtc acccacacaa aggaagaggg ccttgcccct cgccggccgc 2460

tgcttcctgt gaccccgtgg tctatcggcc gcatagtcac ctcgggcttc tcttgagcac 2520

cgctcgtcgc ggcgggggga ggggatctaa tggcgttgga gtttgttcac atttggtggg 2580

tggagactag tcaggccagc ctggcgctgg aagtcattct tggaatttgc ccctttgagt 2640

ttggagcgag gctaattctc aagcctctta gcggttcaaa ggtattttct aaacccgttt 2700

ccagctcgcg gttgaggaca aactcttcgc ggtctttcca gtactcttgg atcggaaacc 2760

cgtcggcctc cgaacggtac tccgccaccg agggacctga gcgagtccgc atcgaccgga 2820

tcggaaaacc tcggcgccgc cacccacc 2848

<210> 712
<211> 3231
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 712
ccgcctagga cataacaggc ctattgattg gaaagtttgt caacgaattg tgggtctttt 60

ggggtttgct gccccttta cgcaatgtgg atatcctgct ttaatgcctt tatatgcatg 120

tatacaagca aaacaggctt ttactttctc gccaacttac aaggcctttc tcagtaaaca 180

gtatatgacc ctttaccccg ttgctcggca acggcctggt ctgtgccaag tgtttgctga 240

cgcaaccccc actggttggg gcttggccat aggccatcag cgcatgcgtg gaacctttgt 300

gtctcctctg ccgatccata ctgcggaact cctagccgct tgttttgctc gcagctggac 360

tggagcaaac ctcatcggga ccgacaattc tgtcgtactc tcccgcaagt atacatcgtt 420

tccatggctg ctaggctgtg ctgccaactg gatcctgcgc gggacgtcct ttgtttacgt 480

cccgtcggcg ctgaatcccg cggacgaccc ctcccggggc cgcttggggc tctaccgccc 540

gcttctccgt ctgccgtacc gtccgaccac ggggcgcacc tctctttacg cggactcccc 600

gtctgtgcct tctcatctgc cggaccgtgt gcacttcgct tcacctctgc acgtcgcatg 660

gaggccaccg tgaacgccca ccggaacttg cccaaggtct tgcataagag gactcttgga 720

ctttcagcaa tgtcatcggg ggaggctaac tgaaacacgg aaggagacaa taccggaagg 780

aacccgcgct atgacggcaa taaaaagaca gaataaaacg cacgggtgtt gggtcgtttg 840

ttcataaacg cggggttcgg tcccagggct ggcactctgt cgatacccca ccgagtcccc 900

attggggcca atacgcccgc gtttcttcct tttccccacc ccacccccca agttcgggtg 960

aaggcccagg gctcgcagcc aacgtcgggg cggcaggccc tgccatagaa atcgataata 1020

tatggtaggg ttcatagcca gagtaacctt ttttttaat ttttatttta ttttattttt 1080

gagtcgggcg cgccaaaatg aagtgaagtt cctatacttt ctagagcgag ctcacgggga 1140

cagccccccc ccaaagcccc cagggatgta attacgtccc tcccccgcta gggggcagca 1200

gcgagccgcc cggggctccg ctccggtccg gcgctccccc cgcatccccg agccggcagc 1260

gtgcggggac agcccgggca cggggaaggt ggcacgggat cgctttcctc tgaacgcttc 1320

tcgctgctct ttgagcctgc agacacctgg ggggatacgg ggaaaaagct ttaggctgaa 1380

agagagattt agaatgacag gcgagctcac ggggacagcc ccccccccaaa gcccccaggg 1440

atgtaattac gtccctcccc cgctaggggg cagcagcgag ccgcccgggg ctccgctccg 1500

gtccggcgct cccccccgcat ccccgagccg gcagcgtgcg gggacagccc gggcacgggg 1560

aaggtggcac gggatcgctt tcctctgaac gcttctcgct gctctttgag cctgcagaca 1620

cctgggggga tacggggaaa aagcttgaaa cttgatctgt cgccgcaatt caagcttcgt 1680

gaggctccgg tgcccgtcag tgacctgcta tactctggag acgcctctcc cggccagagg 1740

agcaaggtat gcgggaggcg accaggagga tagcggggct gacgtcggga ggtggcctcc 1800

gtgggaagga cacccggatc ttgacacagc cttggcagcg gagtcaggaa gagtaggggt 1860

aggttctgga cgccctcttg gccagctcat cgccgcccca ccctctgctg gagcacagag 1920

taattcatac aaaaggaggg atcgccttcg caaggggaga gcccagggac cgtccctaaa 1980

ttctcacaga cccaaatccc tgtagccgcc ccacgacagc gcgaggagca tgcgcccagg 2040

gctgagcgcg ggtagatcag agcacacaag ctcacagtcc ccggcggtgg ggggaggggc 2100

gcgctgagcg ggggccaggg agctggcgcg gggcaaactg ggaaagtggt gtcgtgtgct 2160

ggctccgccc tcttcccgag ggtgggggag aacggtatat aagtgcggta gtcgccttgg 2220

acgttctttt tcgcaacggg tttgccgtca gaacgcaggt gagtggcggg tgtggcttcc 2280

gcgggccccg gagctggagc cctgctctga gcgggccggg ctgatatgcg agtgtcgtcc 2340

gcagggttta gctgtgagca ttcccacttc gagtggcggg cggtgcgggg gtgagagtgc 2400

gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct agcgtggtgt 2460

ccgccgccgc gtgccactcc ggccgcacta tgcgtttttt gtccttgctg ccctcgattg 2520

ccttccagca gcatgggcta acaaagggag ggtgtggggc tcactcttaa ggagcccatg 2580

aagcttacgt tggataggaa tggaagggca ggaggggcga ctggggcccg cccgccttcg 2640

gagcacatgt ccgacgccac ctggatgggg cgaggcctgt ggctttccga agcaatcggg 2700

cgtgagttta gcctacctgg gccatgtggc cctagcactg ggcacggtct ggcctggcgg 2760

tgccgcgttc ccttgcctcc caacaagggt gaggccgtcc cgcccggcac cagttgcttg 2820

cgcggaaaga tggccgctcc cggggccctg ttgcaaggag ctcaaaatgg aggacgcggc 2880

agcccggtgg agcgggcggg tgagtcaccc acacaaagga agagggcctt gcccctcgcc 2940

ggccgctgct tcctgtgacc ccgtggtcta tcggccgcat agtcacctcg ggcttctctt 3000

gagcaccgct cgtcgcggcg gggggagggg atctaatggc gttggagttt gttcacattt 3060

ggtgggtgga gactagtcag gccagcctgg cgctggaagt cattcttgga atttgcccct 3120

ttgagtttgg agcgaggcta attctcaagc ctcttagcgg ttcaaaggta ttttctaaac 3180

ccgtttccag gtgttgtgaa agccaccgct aattcaaagc aagccgccac c 3231

<210> 713
<211> 3260
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 713
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca acccccactg gttggggctt ggccataggc catcagcgca tgcgtggaac 300

ctttgtgtct cctctgccga tccatactgc ggaactccta gccgcttgtt ttgctcgcag 360

ctggactgga gcaaacctca tcgggaccga caattctgtc gtactctccc gcaagcactc 420

accgtttccg cggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcctcttc gccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgccc atgtatcttt ttcacctgtg ccttgttttt gcctgtgttc cgcgtcctac 660

ttttcaagcc tccaagctgt gccttgggcg gctttggggc atggacatag atccctataa 720

agaatttggt tcatcttatc agttgttgaa ttttcttcct ttggacgggg gaggctaact 780

gaaacacgga aggagacaat accggaagga acccgcgcta tgacggcaat aaaaagacag 840

aataaaacgc acgggtgttg ggtcgtttgt tcataaacgc ggggttcggt cccagggctg 900

gcactctgtc gataccccac cgagtcccca ttggggccaa tacgcccgcg tttcttcctt 960

ttccccaccc cacccccaa gttcgggtga aggcccaggg ctcgcagcca acgtcggggc 1020

ggcaggccct gccatagaaa tcgataatat atggtagggt tcatagccag agtaaccttt 1080

ttttttaatt tttattttat tttatttttg agtcgggcgc gccaaaatga agtgaagttc 1140

ctatactttc tagagcgagc tcacggggac agcccccccc caaagccccc agggatgtaa 1200

ttacgtccct cccccgctag ggggcagcag cgagccgccc ggggctccgc tccggtccgg 1260

cgctcccccc gcatccccga gccggcagcg tgcggggaca gcccgggcac ggggaaggtg 1320

gcacgggatc gctttcctct gaacgcttct cgctgctctt tgagcctgca gacacctggg 1380

gggatacggg gaaaaagctt taggctgaaa gagagattta gaatgacagg cgagctcacg 1440

gggacagccc ccccccaaag cccccaggga tgtaattacg tccctccccc gctaggggggc 1500

agcagcgagc cgcccggggc tccgctccgg tccggcgctc cccccgcatc cccgagccgg 1560

cagcgtgcgg ggacagcccg ggcacgggga aggtggcacg ggatcgcttt cctctgaacg 1620

cttctcgctg ctctttgagc ctgcagacac ctgggggggat acggggaaaa agcttgaaac 1680

ttgatctgtc gccgcaattc aagcttcgtg aggctccggt gcccgtcagt gacctgctat 1740

actctggaga cgcctctccc ggccagagga gcaaggtatg cgggaggcga ccaggaggat 1800

agcggggctg acgtcgggag gtggcctccg tgggaaggac acccggatct tgacacagcc 1860

ttggcagcgg agtcaggaag agtaggggta ggttctggac gccctcttgg ccagctcatc 1920

gccgccccac cctctgctgg agcacagagt aattcataca aaaggaggga tcgccttcgc 1980

aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct gtagccgccc 2040

cacgacagcg cgaggagcat gcgcccaggg ctgagcgcgg gtagatcaga gcacacaagc 2100

tcacagtccc cggcggtggg gggaggggcg cgctgagcgg gggccaggga gctggcgcgg 2160

ggcaaactgg gaaagtggtg tcgtgtgctg gctccgccct cttcccgagg gtgggggaga 2220

acggtatata agtgcggtag tcgccttgga cgttcttttt cgcaacgggt ttgccgtcag 2280

aacgcaggtg agtggcgggt gtggcttccg cgggccccgg agctggagcc ctgctctgag 2340

cgggccgggc tgatatgcga gtgtcgtccg cagggtttag ctgtgagcat tcccacttcg 2400

agtggcgggc ggtgcggggg tgagagtgcg aggcctagcg gcaaccccgt agcctcgcct 2460

cgtgtccggc ttgaggccta gcgtggtgtc cgccgccgcg tgccactccg gccgcactat 2520

gcgtttttttg tccttgctgc cctcgattgc cttccagcag catgggctaa caaagggagg 2580

gtgtggggct cactcttaag gagcccatga agcttacgtt ggataggaat ggaagggcag 2640

gaggggcgac tggggcccgc ccgccttcgg agcacatgtc cgacgccacc tggatggggc 2700

gaggcctgtg gctttccgaa gcaatcgggc gtgagtttag cctacctggg ccatgtggcc 2760

ctagcactgg gcacggtctg gcctggcggt gccgcgttcc cttgcctccc aacaagggtg 2820

aggccgtccc gcccggcacc agttgcttgc gcggaaagat ggccgctccc ggggccctgt 2880

tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt gagtcaccca 2940

cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc cgtggtctat 3000

cggccgcata gtcacctcgg gcttctcttg agcaccgctc gtcgcggcgg ggggagggga 3060

tctaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg ccagcctggc 3120

gctggaagtc attcttggaa tttgcccctt tgagtttgga gcgaggctaa ttctcaagcc 3180

tcttagcggt tcaaaggtat tttctaaacc cgtttccagg tgttgtgaaa gccaccgcta 3240

attcaaagca agccgccacc 3260

<210> 714
<211> 3106
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 714
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca acccccactg gttggggcat tgccaccacc tgtcagctcc tttccgggac 300

tttcgctttc cccctcccta ttgccacggc ggaactcatc gccgcctgcc ttgcccgctg 360

ctggacaggg gctcggctgt tgggcactga caattccgtg gtgttgtcgg ggaagctgac 420

gtcctttcca tggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcgtctgc cccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgcct gtgggggagg ctaactgaaa cacggaagga gacaataccg gaaggaaccc 660

gcgctatgac ggcaataaaa agacagaata aaacgcacgg gtgttgggtc gtttgttcat 720

aaacgcgggg ttcggtccca gggctggcac tctgtcgata ccccaccgag tccccattgg 780

ggccaatacg cccgcgtttc ttccttttcc ccaccccacc ccccaagttc gggtgaaggc 840

ccagggctcg cagccaacgt cggggcggca ggccctgcca tagaaatcga taatatatgg 900

tagggttcat agccagagta acctttttt ttaattttta ttttatttta tttttgagtc 960

gggcgcgcca aaatgaagtg aagttcctat actttctaga gcgagctcac ggggacagcc 1020

ccccccaaa gcccccaggg atgtaattac gtccctcccc cgctaggggg cagcagcgag 1080

ccgcccgggg ctccgctccg gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg 1140

gggacagccc gggcacgggg aaggtggcac gggatcgctt tcctctgaac gcttctcgct 1200

gctctttgag cctgcagaca cctgggggga tacggggaaa aagctttagg ctgaaagaga 1260

gatttagaat gacaggcgag ctcacgggga cagcccccc ccaaagcccc cagggatgta 1320

attacgtccc tcccccgcta gggggcagca gcgagccgcc cggggctccg ctccggtccg 1380

gcgctccccc cgcatccccg agccggcagc gtgcggggac agcccgggca cggggaaggt 1440

ggcacgggat cgctttcctc tgaacgcttc tcgctgctct ttgagcctgc agacacctgg 1500

ggggatacgg ggaaaaagct tgaaacttga tctgtcgccg caattcaagc ttcgtgaggc 1560

tccggtgccc gtcagtgacc tgctatactc tggagacgcc tctcccggcc agaggagcaa 1620

ggtatgcggg aggcgaccag gaggatagcg gggctgacgt cgggaggtgg cctccgtggg 1680

aaggacaccc ggatcttgac acagccttgg cagcggagtc aggaagagta ggggtaggtt 1740

ctggacgccc tcttggccag ctcatcgccg ccccaccctc tgctggagca cagagtaatt 1800

catacaaaag gagggatcgc cttcgcaagg ggagagccca gggaccgtcc ctaaattctc 1860

acagacccaa atccctgtag ccgccccacg acagcgcgag gagcatgcgc ccagggctga 1920

gcgcgggtag atcagagcac acaagctcac agtccccggc ggtgggggga ggggcgcgct 1980

gagcgggggc cagggagctg gcgcggggca aactgggaaa gtggtgtcgt gtgctggctc 2040

cgccctcttc ccgagggtgg gggagaacgg tatataagtg cggtagtcgc cttggacgtt 2100

ctttttcgca acgggtttgc cgtcagaacg caggtgagtg gcgggtgtgg cttccgcggg 2160

ccccggagct ggagccctgc tctgagcggg ccgggctgat atgcgagtgt cgtccgcagg 2220

gtttagctgt gagcattccc acttcgagtg gcgggcggtg cgggggtgag agtgcgaggc 2280

ctagcggcaa ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcc 2340

gccgcgtgcc actccggccg cactatgcgt tttttgtcct tgctgccctc gattgccttc 2400

cagcagcatg ggctaacaaa gggagggtgt ggggctcact cttaaggagc ccatgaagct 2460

tacgttggat aggaatggaa gggcaggagg ggcgactggg gcccgcccgc cttcggagca 2520

catgtccgac gccacctgga tggggcgagg cctgtggctt tccgaagcaa tcgggcgtga 2580

gtttagccta cctgggccat gtggccctag cactgggcac ggtctggcct ggcggtgccg 2640

cgttcccttg cctcccaaca agggtgaggc cgtcccgccc ggcaccagtt gcttgcgcgg 2700

aaagatggcc gctcccgggg ccctgttgca aggagctcaa aatggaggac gcggcagccc 2760

ggtggagcgg gcgggtgagt cacccacaca aaggaagagg gccttgcccc tcgccggccg 2820

ctgcttcctg tgaccccgtg gtctatcggc cgcatagtca cctcgggctt ctcttgagca 2880

ccgctcgtcg cggcgggggg aggggatcta atggcgttgg agtttgttca catttggtgg 2940

gtggagacta gtcaggccag cctggcgctg gaagtcattc ttggaatttg ccccttgag 3000

tttggagcga ggctaattct caagcctctt agcggttcaa aggtattttc taaacccgtt 3060

tccaggtgtt gtgaaagcca ccgctaattc aaagcaagcc gccacc 3106

<210> 715
<211> 3260
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 715
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca acccccactg gttggggcat tgccaccacc tgtcagctcc tttccgggac 300

tttcgctttc cccctcccta ttgccacggc ggaactcatc gccgcctgcc ttgcccgctg 360

ctggacaggg gctcggctgt tgggcactga caattccgtg gtgttgtcgg ggaagctgac 420

gtcctttccg cggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcctcttc gccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgccc atgtatcttt ttcacctgtg ccttgttttt gcctgtgttc cgcgtcctac 660

ttttcaagcc tccaagctgt gccttgggcg gctttggggc atggacatag atccctataa 720

agaatttggt tcatcttatc agttgttgaa ttttcttcct ttggacgggg gaggctaact 780

gaaacacgga aggagacaat accggaagga acccgcgcta tgacggcaat aaaaagacag 840

aataaaacgc acgggtgttg ggtcgtttgt tcataaacgc ggggttcggt cccagggctg 900

gcactctgtc gataccccac cgagtcccca ttggggccaa tacgcccgcg tttcttcctt 960

ttccccaccc cacccccaa gttcgggtga aggcccaggg ctcgcagcca acgtcggggc 1020

ggcaggccct gccatagaaa tcgataatat atggtagggt tcatagccag agtaaccttt 1080

ttttttaatt tttattttat tttatttttg agtcgggcgc gccaaaatga agtgaagttc 1140

ctatactttc tagagcgagc tcacggggac agcccccccc caaagccccc agggatgtaa 1200

ttacgtccct cccccgctag ggggcagcag cgagccgccc ggggctccgc tccggtccgg 1260

cgctcccccc gcatccccga gccggcagcg tgcggggaca gcccgggcac ggggaaggtg 1320

gcacgggatc gctttcctct gaacgcttct cgctgctctt tgagcctgca gacacctggg 1380

gggatacggg gaaaaagctt taggctgaaa gagagattta gaatgacagg cgagctcacg 1440

gggacagccc ccccccaaag cccccaggga tgtaattacg tccctccccc gctagggggc 1500

agcagcgagc cgcccggggc tccgctccgg tccggcgctc cccccgcatc cccgagccgg 1560

cagcgtgcgg ggacagcccg ggcacgggga aggtggcacg ggatcgcttt cctctgaacg 1620

cttctcgctg ctctttgagc ctgcagacac ctgggggggat acggggaaaa agcttgaaac 1680

ttgatctgtc gccgcaattc aagcttcgtg aggctccggt gcccgtcagt gacctgctat 1740

actctggaga cgcctctccc ggccagagga gcaaggtatg cgggaggcga ccaggaggat 1800

agcggggctg acgtcgggag gtggcctccg tgggaaggac acccggatct tgacacagcc 1860

ttggcagcgg agtcaggaag agtaggggta ggttctggac gccctcttgg ccagctcatc 1920

gccgccccac cctctgctgg agcacagagt aattcataca aaaggaggga tcgccttcgc 1980

aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct gtagccgccc 2040

cacgacagcg cgaggagcat gcgcccaggg ctgagcgcgg gtagatcaga gcacacaagc 2100

tcacagtccc cggcggtggg gggaggggcg cgctgagcgg gggccaggga gctggcgcgg 2160

ggcaaactgg gaaagtggtg tcgtgtgctg gctccgccct cttcccgagg gtgggggaga 2220

acggtatata agtgcggtag tcgccttgga cgttcttttt cgcaacgggt ttgccgtcag 2280

aacgcaggtg agtggcgggt gtggcttccg cgggccccgg agctggagcc ctgctctgag 2340

cgggccgggc tgatatgcga gtgtcgtccg cagggtttag ctgtgagcat tcccacttcg 2400

agtggcgggc ggtgcggggg tgagagtgcg aggcctagcg gcaaccccgt agcctcgcct 2460

cgtgtccggc ttgaggccta gcgtggtgtc cgccgccgcg tgccactccg gccgcactat 2520

gcgttttttg tccttgctgc cctcgattgc cttccagcag catgggctaa caaagggagg 2580

gtgtggggct cactcttaag gagcccatga agcttacgtt ggataggaat ggaagggcag 2640

gaggggcgac tggggcccgc ccgccttcgg agcacatgtc cgacgccacc tggatggggc 2700

gaggcctgtg gctttccgaa gcaatcgggc gtgagtttag cctacctggg ccatgtggcc 2760

ctagcactgg gcacggtctg gcctggcggt gccgcgttcc cttgcctccc aacaagggtg 2820

aggccgtccc gcccggcacc agttgcttgc gcggaaagat ggccgctccc ggggccctgt 2880

tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt gagtcaccca 2940

cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc cgtggtctat 3000

cggccgcata gtcacctcgg gcttctcttg agcaccgctc gtcgcggcgg ggggagggga 3060

tctaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg ccagcctggc 3120

gctggaagtc attcttggaa tttgcccctt tgagtttgga gcgaggctaa ttctcaagcc 3180

tcttagcggt tcaaaggtat tttctaaacc cgtttccagg tgttgtgaaa gccaccgcta 3240

attcaaagca agccgccacc 3260

<210> 716
<211> 3162
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 716
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca acccccactg gttggggctt ggccataggc catcagcgca tgcgtggaac 300

ctttgtgtct cctctgccga tccatactgc ggaactccta gccgcttgtt ttgctcgcag 360

ctggactgga gcaaacctca tcgggaccga caattctgtc gtactctccc gcaagcactc 420

accgtttccg cggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcctcttc gccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgccc atgtatcttt ttcacctgtg ccttgttttt gcctgtgttc cgcgtcctac 660

ttttcaagcc tccaagctgt gccttgggcg gctttggggc atggacatag atccctataa 720

agaatttggt tcatcttatc agttgttgaa ttttcttcct ttggacatat tatccctaat 780

acttgccacc ccactcttaa tcagtggtgg aagaacggtg tcagaactgt ttgtttcaat 840

tggccattta agtttagtag taaaagactg gttaatgata acaatgcatc gtaaaacctt 900

cagaaggaaa ggagaatgtt ttgtggacca ctttggtttt ctttttgcg tgtggcagtt 960

ttaagttatt agtttttaaa atcagtactt tttaatggaa acaacttgac caaaaatttg 1020

tcacagaatt ttgagatcca ttaaaaaagt taaatgagaa acctgtgtgt tcctttggtc 1080

aacaccgaga catttaggtg aaagcatata ctgagattga gattaacttc ctgtgaaacc 1140

cagtgtctta gacaactgtg gcttgagcac cacctgttgg tattcattac aaacttgctc 1200

actacaataa atgaatttta agctttaaga tgaagtggca tttcttttaa cagttactat 1260

gttggaattg gttacaaatt ttggagtgga ctattgtata tatatatcag ttactgttat 1320

ggatcccacg tcactattgt atactctata ttatactcta tgttatactc tgtaatccta 1380

ctcaataaac gtgtcacgcc tgtgaaaccg tactaagtct cccgtgtctt gttatcacca 1440

tcaggtgaca tcctcgccca ggctgtcaat catgccggta tcgattccag tagcaccggc 1500

cccacgctga caacccactc ttgcagcgtt agcagcgccc ctcttaacaa gccgaccccc 1560

accagcgtcg cggttactaa cactcctctc cccggggcat ccgctactcc cgagctcgaa 1620

ttcgtttatc ggccaccgag gccaagatct ggccgccata tactgagtca ttagggactt 1680

tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg aaagtcccat 1740

tggagccaag tacactgagt caatagggac tttccattgg gttttgccca gtacaaaagg 1800

tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa ggtcaatagg 1860

ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc ccaccattga 1920

cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt cccatagctg 1980

attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga aagggcagcc 2040

aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc attctattgg 2100

ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaggg accggtttgc 2160

cgccagaaca caggtgaggg gcgggtgtgg cttccgcggg ccgccgagct ggaggtcctg 2220

ctccgagcgg gccgggcccc gctgtcgtcg gcggggatta gctgcgagca ttcccgcttc 2280

gagttgcggg cggcgcggga ggcagagtgc gaggcctagc ggcaaccccg tagcctcgcc 2340

tcgtgtccgg cttgaggcct agcgtggtgt ccgcgccgcc gccgcgtgct actccggccg 2400

cactctggtc ttttttttt ttgttgttgt tgccctgctg ccttcgattg ccgttcagca 2460

ataggggcta acaaagggag ggtgcggggc ttgctcgccc ggagcccgga gaggtcatgg 2520

ttggggagga atggagggac aggagtggcg gctggggccc gcccgccttc ggagcacatg 2580

tccgacgcca cctggatggg gcgaggcctg gggtttttcc cgaagcaacc aggctggggt 2640

tagcgtgccg aggccatgtg gccccagcac ccggcacgat ctggcttggc ggcgccgcgt 2700

tgccctgcct ccctaactag ggtgaggcca tcccgtccgg caccagttgc gtgcgtggaa 2760

agatggccgc tcccgggccc tgttgcaagg agctcaaaat ggaggacgcg gcagcccggt 2820

ggagcgggcg ggtgagtcac ccacacaaag gaagagggcc tggtccctca ccggctgctg 2880

cttcctgtga ccccgtggtc ctatcggccg caatagtcac ctcgggcttt tgagcacggc 2940

tagtcgcggc ggggggaggg gatgtaatgg cgttggagtt tgttcacatt tggtgggtgg 3000

agactagtca ggccagcctg gcgctggaag tcatttttgg aatttgtccc cttgagtttt 3060

gagcggagct aattctcggg cttcttagcg gttcaaaggt atcttttaaa ccctttttta 3120

ggtgttgtga aaaccaccgc taattcaaag caagccgcca cc 3162

<210> 717
<211> 3008
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 717
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca acccccactg gttggggcat tgccaccacc tgtcagctcc tttccgggac 300

tttcgctttc cccctcccta ttgccacggc ggaactcatc gccgcctgcc ttgcccgctg 360

ctggacaggg gctcggctgt tgggcactga caattccgtg gtgttgtcgg ggaagctgac 420

gtcctttcca tggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcgtctgc cccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgcct gtatattatc cctaatactt gccaccccac tcttaatcag tggtggaaga 660

acggtgtcag aactgtttgt ttcaattggc catttaagtt tagtagtaaa agactggtta 720

atgataacaa tgcatcgtaa aaccttcaga aggaaaggag aatgttttgt ggaccacttt 780

ggttttcttt tttgcgtgtg gcagttttaa gttattagtt tttaaaatca gtacttttta 840

atggaaacaa cttgaccaaa aatttgtcac agaattttga gatccattaa aaaagttaaa 900

tgagaaacct gtgtgttcct ttggtcaaca ccgagacatt taggtgaaag catatactga 960

gattgagatt aacttcctgt gaaacccagt gtcttagaca actgtggctt gagcaccacc 1020

tgttggtatt cattacaaac ttgctcacta caataaatga attttaagct ttaagatgaa 1080

gtggcatttc ttttaacagt tactatgttg gaattggtta caaattttgg agtggactat 1140

tgtatatata tatcagttac tgttatggat cccacgtcac tattgtatac tctatattat 1200

actctatgtt atactctgta atcctactca ataaacgtgt cacgcctgtg aaaccgtact 1260

aagtctcccg tgtcttgtta tcaccatcag gtgacatcct cgcccaggct gtcaatcatg 1320

ccggtatcga ttccagtagc accggcccca cgctgacaac ccactcttgc agcgttagca 1380

gcgcccctct taacaagccg acccccacca gcgtcgcggt tactaacact cctctccccg 1440

gggcatccgc tactcccgag ctcgaattcg tttatcggcc accgaggcca agatctggcc 1500

gccatatact gagtcattag ggactttcca atgggttttg cccagtacat aaggtcaata 1560

ggggtgaatc aacaggaaag tcccattgga gccaagtaca ctgagtcaat agggactttc 1620

cattgggttt tgcccagtac aaaaggtcaa taggggggtga gtcaatgggt ttttcccatt 1680

attggcacgt acataaggtc aataggggtg agtcattggg tttttccagc caatttataa 1740

aacgccatgt actttcccac cattgacgtc aatgggctat tgaaactaat gcaacgtgac 1800

ctttaaacgg tactttccca tagctgatta atgggaaagt accgttctcg agccaataca 1860

cgtcaatggg aagtgaaagg gcagccaaaa cgtaacaccg ccccggtttt cccctggaaa 1920

ttccatattg gcacgcattc tattggctga gctgcgttct acgtgggtat aagaggcgcg 1980

accagcgtcg gtagggaccg gtttgccgcc agaacacagg tgaggggcgg gtgtggcttc 2040

cgcgggccgc cgagctggag gtcctgctcc gagcgggccg ggccccgctg tcgtcggcgg 2100

ggattagctg cgagcattcc cgcttcgagt tgcgggcggc gcgggaggca gagtgcgagg 2160

cctagcggca accccgtagc ctcgcctcgt gtccggcttg aggcctagcg tggtgtccgc 2220

gccgccgccg cgtgctactc cggccgcact ctggtctttt ttttttttgt tgttgttgcc 2280

ctgctgcctt cgattgccgt tcagcaatag gggctaacaa agggagggtg cggggcttgc 2340

tcgcccggag cccggagagg tcatggttgg ggaggaatgg agggacagga gtggcggctg 2400

gggcccgccc gccttcggag cacatgtccg acgccacctg gatggggcga ggcctggggt 2460

ttttcccgaa gcaaccaggc tggggttagc gtgccgaggc catgtggccc cagcacccgg 2520

cacgatctgg cttggcggcg ccgcgttgcc ctgcctccct aactagggtg aggccatccc 2580

gtccggcacc agttgcgtgc gtggaaagat ggccgctccc gggccctgtt gcaaggagct 2640

caaaatggag gacgcggcag cccggtggag cgggcgggtg agtcacccac acaaaggaag 2700

agggcctggt ccctcaccgg ctgctgcttc ctgtgacccc gtggtcctat cggccgcaat 2760

agtcacctcg ggcttttgag cacggctagt cgcggcgggg ggaggggatg taatggcgtt 2820

ggagtttgtt cacatttggt gggtggagac tagtcaggcc agcctggcgc tggaagtcat 2880

ttttggaatt tgtccccttg agttttgagc ggagctaatt ctcgggcttc ttagcggttc 2940

aaaggtatct tttaaaccct tttttaggtg ttgtgaaaac caccgctaat tcaaagcaag 3000

ccgccacc 3008

<210> 718
<211> 3162
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 718
ccgcctagga cttcctgtta atcaacctct ggattacaaa atttgtgaaa gattgactgg 60

tattcttaac tatgttgctc cttttacgct atgtggatac gctgctttaa tgcctttgta 120

tcatgctatt gcttcccgta tggctttcat tttctcctcc ttgtataaat cctggttgct 180

gtctctttat gaggagttgt ggcccgttgt caggcaacgt ggcgtggtgt gcactgtgtt 240

tgctgacgca acccccactg gttggggcat tgccaccacc tgtcagctcc tttccgggac 300

tttcgctttc cccctcccta ttgccacggc ggaactcatc gccgcctgcc ttgcccgctg 360

ctggacaggg gctcggctgt tgggcactga caattccgtg gtgttgtcgg ggaagctgac 420

gtcctttccg cggctgctcg cctgtgttgc cacctggatt ctgcgcggga cgtccttctg 480

ctacgtccct tcggccctca atccagcgga ccttccttcc cgcggcctgc tgccggctct 540

gcggcctctt ccgcctcttc gccttcgccc tcagacgagt cggatctccc tttgggccgc 600

ctccccgccc atgtatcttt ttcacctgtg ccttgttttt gcctgtgttc cgcgtcctac 660

ttttcaagcc tccaagctgt gccttgggcg gctttggggc atggacatag atccctataa 720

agaatttggt tcatcttatc agttgttgaa ttttcttcct ttggacatat tatccctaat 780

acttgccacc ccactcttaa tcagtggtgg aagaacggtg tcagaactgt ttgtttcaat 840

tggccattta agtttagtag taaaagactg gttaatgata acaatgcatc gtaaaacctt 900

cagaaggaaa ggagaatgtt ttgtggacca ctttggtttt ctttttgcg tgtggcagtt 960

ttaagttatt agtttttaaa atcagtactt tttaatggaa acaacttgac caaaaatttg 1020

tcacagaatt ttgagatcca ttaaaaaagt taaatgagaa acctgtgtgt tcctttggtc 1080

aacaccgaga catttaggtg aaagcatata ctgagattga gattaacttc ctgtgaaacc 1140

cagtgtctta gacaactgtg gcttgagcac cacctgttgg tattcattac aaacttgctc 1200

actacaataa atgaatttta agctttaaga tgaagtggca tttcttttaa cagttactat 1260

gttggaattg gttacaaatt ttggagtgga ctattgtata tatatatcag ttactgttat 1320

ggatcccacg tcactattgt atactctata ttatactcta tgttatactc tgtaatccta 1380

ctcaataaac gtgtcacgcc tgtgaaaccg tactaagtct cccgtgtctt gttatcacca 1440

tcaggtgaca tcctcgccca ggctgtcaat catgccggta tcgattccag tagcaccggc 1500

cccacgctga caacccactc ttgcagcgtt agcagcgccc ctcttaacaa gccgaccccc 1560

accagcgtcg cggttactaa cactcctctc cccggggcat ccgctactcc cgagctcgaa 1620

ttcgtttatc ggccaccgag gccaagatct ggccgccata tactgagtca ttagggactt 1680

tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg aaagtcccat 1740

tggagccaag tacactgagt caatagggac tttccattgg gttttgccca gtacaaaagg 1800

tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa ggtcaatagg 1860

ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc ccaccattga 1920

cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt cccatagctg 1980

attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga aagggcagcc 2040

aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc attctattgg 2100

ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaggg accggtttgc 2160

cgccagaaca caggtgaggg gcgggtgtgg cttccgcggg ccgccgagct ggaggtcctg 2220

ctccgagcgg gccgggcccc gctgtcgtcg gcgggggatta gctgcgagca ttcccgcttc 2280

gagttgcggg cggcgcggga ggcagagtgc gaggcctagc ggcaaccccg tagcctcgcc 2340

tcgtgtccgg cttgaggcct agcgtggtgt ccgcgccgcc gccgcgtgct actccggccg 2400

cactctggtc ttttttttt ttgttgttgt tgccctgctg ccttcgattg ccgttcagca 2460

ataggggcta acaaagggag ggtgcggggc ttgctcgccc ggagcccgga gaggtcatgg 2520

ttggggagga atggagggac aggagtggcg gctggggccc gcccgccttc ggagcacatg 2580

tccgacgcca cctggatggg gcgaggcctg gggtttttcc cgaagcaacc aggctggggt 2640

tagcgtgccg aggccatgtg gccccagcac ccggcacgat ctggcttggc ggcgccgcgt 2700

tgccctgcct ccctaactag ggtgaggcca tcccgtccgg caccagttgc gtgcgtggaa 2760

agatggccgc tcccgggccc tgttgcaagg agctcaaaat ggaggacgcg gcagcccggt 2820

ggagcgggcg ggtgagtcac ccacacaaag gaagagggcc tggtccctca ccggctgctg 2880

cttcctgtga ccccgtggtc ctatcggccg caatagtcac ctcgggcttt tgagcacggc 2940

tagtcgcggc gggggggaggg gatgtaatgg cgttggagtt tgttcacatt tggtgggtgg 3000

agactagtca ggccagcctg gcgctggaag tcatttttgg aatttgtccc cttgagtttt 3060

gagcggagct aattctcggg cttcttagcg gttcaaaggt atcttttaaa ccctttttta 3120

ggtgttgtga aaaccaccgc taattcaaag caagccgcca cc 3162

<210> 719
<211> 1862
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 719
cttgctcacc tcgagtacga tagccggcta atcagccatg gctaataaag gaaatttatt 60

ttcattgcaa tagtgtgttg gaatttttg tgtctctcac tcggaaggac atatgggagg 120

gcaaatcatt taaaacatca gaatgagtat ttggtttaga gtttggcaac atatgcccat 180

atgctggctg ccatgaacaa aggttggcta taaagaggtc atcagtatat gaaacagccc 240

cctgctgtcc attccttatt ccatagaaaa gccttgactt gaggttagat ttttttata 300

ttttgttttg tgttattttt ttctttaaca tccctaaaat tttccttaca tgttttacta 360

gccagatttt tcctcctctc ctgactactc ccagtcatag ctgtccctct tctcttatgg 420

agatctattc ggacggtgac gatatttgaa aatatggcat attgaaaatg tcgccgatgt 480

gagtttctgt gtaactgata tcgccatttt tccaaaagtg atttttgggc atacgcgata 540

tctggcgata gcgcttatat cgtttacggg ggatggcgat agacgacttt ggtgacttgg 600

gcgattctgt gtgtcgcaaa tatcgcagtt tcgatatagg tgacagacga tatgaggcta 660

tatcgccgat agaggcgaca tcaagctggc acatggccaa tgcatatcga tctatacatt 720

gaatcaatat tggccattag ccatattatt cattggttat atagcataaa tcaatattgg 780

ctattggcca ttgcatacgt tgtatccata tcataatatg tacatttata ttggctcatg 840

tccaacatta ccgccatgtt gacattgatt attgactagt tattaatagt aatcaattac 900

ggggtcatta gttcatagcc catatatgga gttccgcgtt acataactta cggtaaatgg 960

cccgcctggc tgaccgccca acgacccccg cccattgacg tcaataatga cgtatgttcc 1020

catagtaacg ccaataggga ctttccattg acgtcaatgg gtggagtatt tacggtaaac 1080

tgcccacttg gcagtacatc aagtgtatca tatgccaagt acgccccta ttgacgtcaa 1140

tgacggtaaa tggcccgcct ggcattatgc ccagtacatg accttatggg actttcctac 1200

ttggcagtac atctacgtat tagtcatcgc tattaccatg gtgatgcggt tttggcagta 1260

catcaatggg cgtggatagc ggtttgactc acggggattt ccaagtctcc accccattga 1320

cgtcaatggg agtttgtttt ggcaccaaaa tcaacgggac tttccaaaat gtcgtaacaa 1380

ctccgcccca ttgacgcaaa tgggcggtag gcgtgtacgg tgggaggtct atataagcag 1440

agctcgttta gtgaaccgtc agatcgcctg gagacgccat ccacgctgtt ttgacctcca 1500

tagaagatac cgggaccgat ccagcctccg cggccgggaa cggtgcattg gaacgcggat 1560

tccccgtgcc aagagtgacc ctggcagaac tcggtaagtc tgttgacatg tatgtgatgt 1620

atactaacct gcatgggacg tggatttact tgtgtatgtc agatagagta aagattaact 1680

cttgcatgtg agcggggcat cgagatagcg ataaatgagt caggaggacg gagcctctgc 1740

taaccatgtt catgccttct tctttttcct acagctcctg ggcaacgtgc tggttattgt 1800

gctgtctcat cattttggca aagaatttca ccgtccttga cacgaagttt gctgccgcca 1860

cc 1862

<210> 720
<211> 1956
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 720
cttgctcacc tcgagtacga tagccggcta atcagccagc tggagcctcg gtagccgttc 60

ctcctgcccg ctgggcctcc caacgggccc tcctcccctc cttgcaccgg cccttcctgg 120

tctttgaata aatggctaat aaaggaaatt tattttcatt gcaatagtgt gttggaattt 180

tttgtgtctc tcactcggaa ggacatatgg gagggcaaat catttaaaac atcagaatga 240

gtatttggtt tagagtttgg caacatatgc ccatatgctg gctgccatga acaaaggttg 300

gctataaaga ggtcatcagt atatgaaaca gccccctgct gtccattcct tattccatag 360

aaaagccttg acttgaggtt agatttttt tatattttgt tttgtgttat ttttttcttt 420

aacatcccta aaattttcct tacatgtttt actagccaga tttttcctcc tctcctgact 480

actcccagtc atagctgtcc ctcttctctt atggagatct attcggacgg tgacgatatt 540

tgaaaatatg gcatattgaa aatgtcgccg atgtgagttt ctgtgtaact gatatcgcca 600

tttttccaaa agtgattttt gggcatacgc gatatctggc gatagcgctt atatcgttta 660

cgggggatgg cgatagacga ctttggtgac ttgggcgatt ctgtgtgtcg caaatatcgc 720

agtttcgata taggtgacag acgatatgag gctatatcgc cgatagaggc gacatcaagc 780

tggcacatgg ccaatgcata tcgatctata cattgaatca atattggcca ttagccatat 840

tattcattgg ttatatagca taaatcaata ttggctattg gccattgcat acgttgtatc 900

catatcataa tatgtacatt tatattggct catgtccaac attaccgcca tgttgacatt 960

gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 1020

tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 1080

cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 1140

attgacgtca atgggtggag tatttacggt aaactgccca cttggcagta catcaagtgt 1200

atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 1260

atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 1320

tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 1380

actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 1440

aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 1500

gtaggcgtgt acggtgggag gtctatataa gcagagctcg tttagtgaac cgtcagatcg 1560

cctggagacg ccatccacgc tgttttgacc tccatagaag ataccgggac cgatccagcc 1620

tccgcggccg ggaacggtgc attggaacgc ggattccccg tgccaagagt gaccctggca 1680

gaactcggta agtctgttga catgtatgtg atgtatacta acctgcatgg gacgtggatt 1740

tacttgtgta tgtcagatag agtaaagatt aactcttgca tgtgagcggg gcatcgagat 1800

agcgataaat gagtcaggag gacggagcct ctgctaacca tgttcatgcc ttcttctttt 1860

tcctacagct cctgggcaac gtgctggtta ttgtgctgtc tcatcatttt ggcaaagaat 1920

ttcaccgtcc ttgacacgaa gtttgctgcc gccacc 1956

<210> 721
<211> 2541
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 721
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaaggggga ggctaactga aacacggaag 120

gagacaatac cggaaggaac ccgcgctatg acggcaataa aaagacagaa taaaacgcac 180

gggtgttggg tcgtttgttc ataaacgcgg ggttcggtcc cagggctggc actctgtcga 240

taccccaccg agtccccatt ggggccaata cgcccgcgtt tcttccтttt ccccacccca 300

ccccccaagt tcgggtgaag gcccagggct cgcagccaac gtcggggcgg caggccctgc 360

catagaaatc gataatatat ggtagggttc atagccagag taacctttt ttttaatttt 420

tattttattt tatttttgag tcgggcgcgc caaaatgaag tgaagttcct atactttcta 480

gagcgagctc acggggacag ccccccccca aagcccccag ggatgtaatt acgtccctcc 540

cccgctaggg ggcagcagcg agccgcccgg ggctccgctc cggtccggcg ctcccccgc 600

atccccgagc cggcagcgtg cggggacagc ccgggcacgg ggaaggtggc acgggatcgc 660

tttcctctga acgcttctcg ctgctctttg agcctgcaga cacctggggg gatacgggga 720

aaaagcttta ggctgaaaga gagatttaga atgacaggcg agctcacggg gacagccccc 780

ccccaaagcc cccagggatg taattacgtc cctcccccgc taggggggcag cagcgagccg 840

cccggggctc cgctccggtc cggcgctccc cccgcatccc cgagccggca gcgtgcgggg 900

acagcccggg cacggggaag gtggcacggg atcgctttcc tctgaacgct tctcgctgct 960

ctttgagcct gcagacacct ggggggatac ggggaaaaag cttgaaactt gatctgtcgc 1020

cgcaattcaa gcttcgtgag gctccggtgc ccgtcagtga cctgctatac tctggagacg 1080

agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 1140

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 1200

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 1260

caaggggaga gcccagggac cgtccctaaa ttctcacaga cccaaatccc tgtagccgcc 1320

ccacgacagc gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 1380

ctcatagacc ctggtcgtgg gggggaggac cggggagctg gcgcggggca aactgggaaa 1440

gcggtgtcgt gtgctggctc cgccctcttc ccgagggtgg gggagaacgg tatataagtg 1500

cggcagtcgc cttggacgtt ctttttcgca acgggtttgc cgtcagaacg caggtgaggg 1560

gcgggtgtgg cttccgcggg ccgccgagct ggaggtcctg ctccgagcgg gccgggcccc 1620

gctgtcgtcg gcggggatta gctgcgagca ttcccgcttc gagttgcggg cggcgcggga 1680

ggcagagtgc gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct 1740

agcgtggtgt ccgcgccgcc gccgcgtgct actccggccg cactctggtc ttttttttt 1800

tgttgttgtt gccctgctgc cttcgattgc cgttcagcaa taggggctaa caaagggagg 1860

gtgcggggct tgctcgcccg gagcccggag aggtcatggt tggggaggaa tggagggaca 1920

ggagtggcgg ctggggcccg cccgccttcg gagcacatgt ccgacgccac ctggatgggg 1980

cgaggcctgg ggtttttccc gaagcaacca ggctggggtt agcgtgccga ggccatgtgg 2040

ccccagcacc cggcacgatc tggcttggcg gcgccgcgtt gccctgcctc cctaactagg 2100

gtgaggccat cccgtccggc accagttgcg tgcgtggaaa gatggccgct cccgggccct 2160

gttgcaagga gctcaaaatg gaggacgcgg cagcccggtg gagcgggcgg gtgagtcacc 2220

cacacaaagg aagagggcct ggtccctcac cggctgctgc ttcctgtgac cccgtggtcc 2280

tatcggccgc aatagtcacc tcgggctttt gagcacggct agtcgcggcg gggggagggg 2340

atgtaatggc gttggagttt gttcacattt ggtgggtgga gactagtcag gccagcctgg 2400

cgctggaagt catttttgga atttgtcccc ttgagttttg agcggagcta attctcgggc 2460

ttcttagcgg ttcaaaggta tcttttaaac cctttttag gtgttgtgaa aaccaccgct 2520

aattcaaagc aagccgccac c 2541

<210> 722
<211> 2124
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 722
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaattcgt ttatcggcca ccgaggccaa gatctggccg 720

ccaacccgcc ccgaccggag ctgagagtaa ttcatacaaa aggactcgcc cctgccttgg 780

ggaatcccag ggaccgtcgt taaactccca ctaacgtaga acccagagat cgctgcgttc 840

ccgccccctc acccgcccgc tctcgtcatc actgaggtgg agaatagcat gcgtgaggct 900

ccggtgcccg tcagtgggca gagcgcacat cgcccacagt ccccgagaag ttgggggggag 960

gggtcggcaa ttgaacgggt gcctagagaa ggtggcgcgg ggtaaactgg gaaagtgatg 1020

tcgtgtactg gctccgcctt tttcccgagg gtgggggaga accgtatata agtgcagtag 1080

tcgccgtgaa cgttcttttt cgcaacgggt ttgccgccag aacacaggta agtgccgtgt 1140

gtggttcccg cgggcctggc ctctttacgg gttatggccc ttgcgtgcct tgaattactt 1200

ccacctggct ccagtacgtg attcttgatc ccgagctgga gccaggggcg ggccttgcgc 1260

tttaggagcc ccttcgcctc gtgcttgagt tgaggcctgg cctgggcgct ggggccgccg 1320

cgtgcgaatc tggtggcacc ttcgcgcctg tctcgctgct ttcgataagt ctctagccat 1380

ttaaaatttt tgatgacgtg ctgcgacgct ttttttctgg caagatagtc ttgtaaatgc 1440

gggccaggat ctgcacactg gtatttcggt ttttgggccc gcggccggcg acggggcccg 1500

tgcgtcccag cgcacatgtt cggcgaggcg gggcctgcga gcgcggccac cgagaatcgg 1560

acgggggtag tctcaagctg gccggcctgc tctggtgcct ggcctcgcgc cgccgtgtat 1620

cgccccgccc tgggcggcaa ggctggcccg gtcggcacca gttgcgtgag cggaaagatg 1680

gccgcttccc ggccctgctc cagggggctc aaaatggagg acgcggcgct cgggagagcg 1740

ggcgggtgag tcacccacac aaaggaaaag ggcctttccg tcctcagccg tcgcttcatg 1800

tgactccacg gagtaccggg cgccgtccag gcacctcgat tagttctgga gcttttggag 1860

tacgtcgtct ttaggttggg gggaggggtt ttatgcgatg gagtttcccc acactgagtg 1920

ggtggagact gaagttaggc cagcttggca cttgatgtaa ttctccttgg aatttggcct 1980

ttttgagttt ggatcttggt tcattctcaa gcctcagaca gtggttcaaa gttttttct 2040

tccatttcag gtgtcgtgaa aactaccagc ttgcttgttc tttttgcaga agctcagaat 2100

aaacgctcaa ctttggccgc cacc 2124

<210> 723
<211> 2768
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 723
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aatgaagtga agttcctata ctttctagag cgagctcacg 720

gggacagccc ccccccaaag cccccaggga tgtaattacg tccctccccc gctaggggggc 780

agcagcgagc cgcccggggc tccgctccgg tccggcgctc cccccgcatc cccgagccgg 840

cagcgtgcgg ggacagcccg ggcacgggga aggtggcacg ggatcgcttt cctctgaacg 900

cttctcgctg ctctttgagc ctgcagacac ctgggggggat acggggaaaa agctttaggc 960

tgaaagagag atttagaatg acaggcgagc tcacggggac agccccccccc caaagccccc 1020

agggatgtaa ttacgtccct cccccgctag ggggcagcag cgagccgccc ggggctccgc 1080

tccggtccgg cgctcccccc gcatccccga gccggcagcg tgcggggaca gcccgggcac 1140

ggggaaggtg gcacgggatc gctttcctct gaacgcttct cgctgctctt tgagcctgca 1200

gacacctggg gggatacggg gaaaaagctt gaaacttgat ctgtcgccgc aattcaagct 1260

tcgtgaggct ccggtgcccg tcagtgacct gctatactct ggagacgagc ggggctgacg 1320

tcgggaggtg gcctccgtgg gaagggacac ccggatcttg acacagcctt ggcagcggag 1380

taaggaagag tagggataga ttctggccgc cctcttggcc agcttctcgc cgccccaccc 1440

tccgctaggg ccaagagtaa ttcatacaaa aggagggatc gccttcgcaa ggggagagcc 1500

cagggaccgt ccctaaattc tcacagaccc aaatccctgt agccgcccca cgacagcgcg 1560

aggagcatgc gctcagggct gagcgcgggg agagcagagc acacaagctc atagaccctg 1620

gtcgtggggg ggaggaccgg ggagctggcg cggggcaaac tgggaaagcg gtgtcgtgtg 1680

ctggctccgc cctcttcccg agggtggggg agaacggtat ataagtgcgg cagtcgcctt 1740

ggacgttctt tttcgcaacg ggtttgccgt cagaacgcag gtgaggggcg ggtgtggctt 1800

ccgcgggccg ccgagctgga ggtcctgctc cgagcgggcc gggccccgct gtcgtcggcg 1860

gggattagct gcgagcattc ccgcttcgag ttgcgggcgg cgcgggaggc agagtgcgag 1920

gcctagcggc aaccccgtag cctcgcctcg tgtccggctt gaggcctagc gtggtgtccg 1980

cgccgccgcc gcgtgctact ccggccgcac tctggtcttt ttttttttgt tgttgttgcc 2040

ctgctgcctt cgattgccgt tcagcaatag gggctaacaa agggagggtg cggggcttgc 2100

tcgcccggag cccggagagg tcatggttgg ggaggaatgg agggacagga gtggcggctg 2160

gggcccgccc gccttcggag cacatgtccg acgccacctg gatggggcga ggcctggggt 2220

ttttcccgaa gcaaccaggc tggggttagc gtgccgaggc catgtggccc cagcacccgg 2280

cacgatctgg cttggcggcg ccgcgttgcc ctgcctccct aactagggtg aggccatccc 2340

gtccggcacc agttgcgtgc gtggaaagat ggccgctccc gggccctgtt gcaaggagct 2400

caaaatggag gacgcggcag cccggtggag cgggcgggtg agtcacccac acaaaggaag 2460

agggcctggt ccctcaccgg ctgctgcttc ctgtgacccc gtggtcctat cggccgcaat 2520

agtcacctcg ggcttttgag cacggctagt cgcggcgggg ggaggggatg taatggcgtt 2580

ggagtttgtt cacatttggt gggtggagac tagtcaggcc agcctggcgc tggaagtcat 2640

ttttggaatt tgtccccttg agttttgagc ggagctaatt ctcgggcttc ttagcggttc 2700

aaaggtatct tttaaaccct tttttaggtg ttgtgaaaac caccgctaat tcaaagcaag 2760

ccgccacc 2768

<210> 724
<211> 2143
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 724
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaagcggggc tgacgtcggg aggtggcctc cgtgggaagg 720

gacacccgga tcttgacaca gccttggcag cggagtaagg aagagtaggg atagattctg 780

gccgccctct tggccagctt ctcgccgccc caccctccgc tagggccaag agtaattcat 840

acaaaaggag ggatcgcctt cgcaagggga gagcccaggg accgtcccta aattctcaca 900

gacccaaatc cctgtagccg ccccacgaca gcgcgaggag catgcgctca gggctgagcg 960

cggggagagc agagcacaca agctcataga ccctggtcgt gggggggagg accggggagc 1020

tggcgcgggg caaactggga aagcggtgtc gtgtgctggc tccgccctct tcccgagggt 1080

gggggagaac ggtatataag tgcggcagtc gccttggacg ttctttttcg caacgggttt 1140

gccgtcagaa cgcaggtgag gggcgggtgt ggcttccgcg ggccgccgag ctggaggtcc 1200

tgctccgagc gggccgggcc ccgctgtcgt cggcggggat tagctgcgag cattcccgct 1260

tcgagttgcg ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc cgtagcctcg 1320

cctcgtgtcc ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg ctactccggc 1380

cgcactctgg tctttttttt tttgttgttg ttgccctgct gccttcgatt gccgttcagc 1440

aataggggct aacaaaggga gggtgcgggg cttgctcgcc cggagcccgg agaggtcatg 1500

gttggggagg aatggaggga caggagtggc ggctggggcc cgcccgcctt cggagcacat 1560

gtccgacgcc acctggatgg ggcgaggcct ggggtttttc ccgaagcaac caggctgggg 1620

ttagcgtgcc gaggccatgt ggccccagca cccggcacga tctggcttgg cggcgccgcg 1680

ttgccctgcc tccctaacta gggtgaggcc atcccgtccg gcaccagttg cgtgcgtgga 1740

aagatggccg ctcccgggcc ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg 1800

tggagcgggc gggtgagtca cccacacaaa ggaagagggc ctggtccctc accggctgct 1860

gcttcctgtg accccgtggt cctatcggcc gcaatagtca cctcgggctt ttgagcacgg 1920

ctagtcgcgg cgggggggagg ggatgtaatg gcgttggagt ttgttcacat ttggtgggtg 1980

gagactagtc aggccagcct ggcgctggaa gtcatttttg gaatttgtcc ccttgagttt 2040

tgagcggagc taattctcgg gcttcttagc ggttcaaagg tatcttttaa acccttttt 2100

aggtgttgtg aaaaccaccg ctaattcaaa gcaagccgcc acc 2143

<210> 725
<211> 2209
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 725
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaaag cggggctgac gtcgggaggt ggcctccgtg 780

ggaagggaca cccggatctt gacacagcct tggcagcgga gtaaggaaga gtagggatag 840

attctggccg ccctcttggc cagcttctcg ccgccccacc ctccgctagg gccaagagta 900

attcatacaa aaggagggat cgccttcgca aggggagagc ccagggaccg tccctaaatt 960

ctcacagacc caaatccctg tagccgcccc acgacagcgc gaggagcatg cgctcagggc 1020

tgagcgcggg gagagcagag cacacaagct catagaccct ggtcgtgggg gggaggaccg 1080

gggagctggc gcggggcaaa ctgggaaagc ggtgtcgtgt gctggctccg ccctcttccc 1140

gagggtgggg gagaacggta tataagtgcg gcagtcgcct tggacgttct ttttcgcaac 1200

gggtttgccg tcagaacgca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg 1260

aggtcctgct ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt 1320

cccgcttcga gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta 1380

gcctcgcctc gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac 1440

tccggccgca ctctggtctt ttttttttg ttgttgttgc cctgctgcct tcgattgccg 1500

ttcagcaata ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag 1560

gtcatggttg gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga 1620

gcacatgtcc gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg 1680

ctggggttag cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc 1740

gccgcgttgc cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg 1800

cgtggaaaga tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca 1860

gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg 1920

gctgctgctt cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga 1980

gcacggctag tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg 2040

tgggtggaga ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt 2100

gagttttgag cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc 2160

ttttttaggt gttgtgaaaa ccaccgctaa ttcaaagcaa gccgccacc 2209

<210> 726
<211> 2177
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 726
gatcttttc cctctgccaa aaattatggg gacatcatga agcccttga gcatctgact 60

tctggctaat aaaggaaatt tattttcatt gcaatagtgt gttggaattt tttgtgtctc 120

tcactcggaa ggacatatgg gagggcaaat catttaaaac atcagaatga gtatttggtt 180

tagagtttgg caacatatgc ccatatgctg gctgccatga acaaaggttg gctataaaga 240

ggtcatcagt atatgaaaca gccccctgct gtccattcct tattccatag aaaagccttg 300

acttgaggtt agatttttt tatattttgt tttgtgttat ttttttcttt aacatcccta 360

aaattttcct tacatgtttt actagccaga tttttcctcc tctcctgact actcccagtc 420

atagctgtcc ctcttctctt atggagatca tattacccct aacacctgcc accccagtct 480

taatcagtgg tggaagaact ctcagaactg tttgtctcaa ttggccattt aagtttaata 540

gtgaaagact ggttaatgat aacaatgcat cggaaaacct tcaggaggaa aggagaatgt 600

tttgtggaac atttttgtgt gtgtggcagt tttaagttat tagttttcaa aatcagtact 660

ttttaatgga aacaacttga ccaaaaatct gtcacagaat tttgaaccca ttaaaaagcg 720

gggctgacgt cgggaggtgg cctccgtggg aagggacacc cggatcttga cacagccttg 780

gcagcggagt aaggaagagt agggatagat tctggccgcc ctcttggcca gcttctcgcc 840

gccccaccct ccgctagggc caagagtaat tcatacaaaa ggagggatcg ccttcgcaag 900

gggagagccc agggaccgtc cctaaattct cacagaccca aatccctgta gccgccccac 960

gacagcgcga ggagcatgcg ctcagggctg agcgcgggga gagcagagca cacaagctca 1020

tagaccctgg tcgtgggggg gaggaccggg gagctggcgc ggggcaaact gggaaagcgg 1080

tgtcgtgtgc tggctccgcc ctcttcccga gggtggggga gaacggtata taagtgcggc 1140

agtcgccttg gacgttcttt ttcgcaacgg gtttgccgtc agaacgcagg tgaggggcgg 1200

gtgtggcttc cgcgggccgc cgagctggag gtcctgctcc gagcgggccg ggccccgctg 1260

tcgtcggcgg ggattagctg cgagcattcc cgcttcgagt tgcgggcggc gcgggaggca 1320

gagtgcgagg cctagcggca accccgtagc ctcgcctcgt gtccggcttg aggcctagcg 1380

tggtgtccgc gccgccgccg cgtgctactc cggccgcact ctggtctttt ttttttgtt 1440

gttgttgccc tgctgccttc gattgccgtt cagcaatagg ggctaacaaa gggagggtgc 1500

ggggcttgct cgcccggagc ccggagaggt catggttggg gaggaatgga gggacaggag 1560

tggcggctgg ggcccgcccg ccttcggagc acatgtccga cgccacctgg atggggcgag 1620

gcctggggtt tttcccgaag caaccaggct ggggttagcg tgccgaggcc atgtggcccc 1680

agcacccggc acgatctggc ttggcggcgc cgcgttgccc tgcctcccta actagggtga 1740

ggccatcccg tccggcacca gttgcgtgcg tggaaagatg gccgctcccg ggccctgttg 1800

caaggagctc aaaatggagg acgcggcagc ccggtggagc gggcgggtga gtcacccaca 1860

caaaggaaga gggcctggtc cctcaccggc tgctgcttcc tgtgaccccg tggtcctatc 1920

ggccgcaata gtcacctcgg gcttttgagc acggctagtc gcggcggggg gaggggatgt 1980

aatggcgttg gagtttgttc acatttggtg ggtggagact agtcaggcca gcctggcgct 2040

ggaagtcatt tttggaattt gtccccttga gttttgagcg gagctaattc tcgggcttct 2100

tagcggttca aaggtatctt ttaaaccctt ttttaggtgt tgtgaaaacc accgctaatt 2160

caaagcaagc cgccacc 2177

<210> 727
<211> 2007
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 727
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagtctga gtgggcggca gcctgtgtgt 120

gcctgggttc tctctgtccc ggaatgtgcc aacaatggag gtgtttacct gtctcagacc 180

aaggacctct ctgcagctgc atggggctgg ggagggagaa ctgcagggag tatgggaggg 240

gaagctgagg tgggcctgct caagagaagg tgctgaacca tattacccct aacacctgcc 300

accccagtct taatcagtgg tggaagaact ctcagaactg tttgtctcaa ttggccattt 360

aagtttaata gtgaaagact ggttaatgat aacaatgcat cggaaaacct tcaggaggaa 420

aggagaatgt tttgtggaac atttttgtgt gtgtggcagt tttaagttat tagttttcaa 480

aatcagtact ttttaatgga aacaacttga ccaaaaatct gtcacagaat tttgaaccca 540

ttaaaaagcg gggctgacgt cgggaggtgg cctccgtggg aagggacacc cggatcttga 600

cacagccttg gcagcggagt aaggaagagt agggatagat tctggccgcc ctcttggcca 660

gcttctcgcc gccccaccct ccgctagggc caagagtaat tcatacaaaa ggagggatcg 720

ccttcgcaag gggagagccc agggaccgtc cctaaattct cacagaccca aatccctgta 780

gccgccccac gacagcgcga ggagcatgcg ctcagggctg agcgcgggga gagcagagca 840

cacaagctca tagaccctgg tcgtgggggg gaggaccggg gagctggcgc ggggcaaact 900

gggaaagcgg tgtcgtgtgc tggctccgcc ctcttcccga gggtgggggа gaacggtata 960

taagtgcggc agtcgccttg gacgttcttt ttcgcaacgg gtttgccgtc agaacgcagg 1020

tgaggggcgg gtgtggcttc cgcgggccgc cgagctggag gtcctgctcc gagcgggccg 1080

ggccccgctg tcgtcggcgg ggattagctg cgagcattcc cgcttcgagt tgcgggcggc 1140

gcgggaggca gagtgcgagg cctagcggca accccgtagc ctcgcctcgt gtccggcttg 1200

aggcctagcg tggtgtccgc gccgccgccg cgtgctactc cggccgcact ctggtctttt 1260

ttttttgtt gttgttgccc tgctgccttc gattgccgtt cagcaatagg ggctaacaaa 1320

gggagggtgc ggggcttgct cgcccggagc ccggagaggt catggttggg gaggaatgga 1380

gggacaggag tggcggctgg ggcccgcccg ccttcggagc acatgtccga cgccacctgg 1440

atggggcgag gcctggggtt tttcccgaag caaccaggct ggggttagcg tgccgaggcc 1500

atgtggcccc agcacccggc acgatctggc ttggcggcgc cgcgttgccc tgcctcccta 1560

actagggtga ggccatcccg tccggcacca gttgcgtgcg tggaaagatg gccgctcccg 1620

ggccctgttg caaggagctc aaaatggagg acgcggcagc ccggtggagc gggcgggtga 1680

gtcacccaca caaaggaaga gggcctggtc cctcaccggc tgctgcttcc tgtgaccccg 1740

tggtcctatc ggccgcaata gtcacctcgg gcttttgagc acggctagtc gcggcggggg 1800

gaggggatgt aatggcgttg gagtttgttc acatttggtg ggtggagact agtcaggcca 1860

gcctggcgct ggaagtcatt tttggaattt gtccccttga gttttgagcg gagctaattc 1920

tcgggcttct tagcggttca aaggtatctt ttaaaccctt ttttaggtgt tgtgaaaacc 1980

accgctaatt caaagcaagc cgccacc 2007

<210> 728
<211> 2495
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 728
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca tagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aataggctga aagagagatt tagaatgaca ggcgagctca 720

cggggacagc ccccccccaa agcccccagg gatgtaatta cgtccctccc ccgctagggg 780

gcagcagcga gccgcccggg gctccgctcc ggtccggcgc tccccccgca tccccgagcc 840

ggcagcgtgc ggggacagcc cgggcacggg gaaggtggca cgggatcgct ttcctctgaa 900

cgcttctcgc tgctctttga gcctgcagac acctgggggg atacggggaa aaagcttgaa 960

acttgatctg tcgccgcaat tcaagcttcg tgaggctccg gtgcccgtca gtgacctgct 1020

atactctgga gacgagcggg gctgacgtcg ggaggtggcc tccgtgggaa gggacacccg 1080

gatcttgaca cagccttggc agcggagtaa ggaagagtag ggatagattc tggccgccct 1140

cttggccagc ttctcgccgc cccaccctcc gctagggcca agagtaattc atacaaaagg 1200

agggatcgcc ttcgcaaggg gagagcccag ggaccgtccc taaattctca cagacccaaa 1260

tccctgtagc cgccccacga cagcgcgagg agcatgcgct cagggctgag cgcggggaga 1320

gcagagcaca caagctcata gaccctggtc gtgggggga ggaccgggga gctggcgcgg 1380

ggcaaactgg gaaagcggtg tcgtgtgctg gctccgccct cttcccgagg gtgggggaga 1440

acggtatata agtgcggcag tcgccttgga cgttcttttt cgcaacgggt ttgccgtcag 1500

aacgcaggtg aggggcgggt gtggcttccg cgggccgccg agctggaggt cctgctccga 1560

gcgggccggg ccccgctgtc gtcggcgggg attagctgcg agcattcccg cttcgagttg 1620

cgggcggcgc gggaggcaga gtgcgaggcc tagcggcaac cccgtagcct cgcctcgtgt 1680

ccggcttgag gcctagcgtg gtgtccgcgc cgccgccgcg tgctactccg gccgcactct 1740

ggtctttttt tttttgttgt tgttgccctg ctgccttcga ttgccgttca gcaatagggg 1800

ctaacaaagg gagggtgcgg ggcttgctcg cccggagccc ggagaggtca tggttgggga 1860

ggaatggagg gacaggagtg gcggctgggg cccgcccgcc ttcggagcac atgtccgacg 1920

ccacctggat ggggcgaggc ctggggtttt tcccgaagca accaggctgg ggttagcgtg 1980

ccgaggccat gtggccccag cacccggcac gatctggctt ggcggcgccg cgttgccctg 2040

cctccctaac tagggtgagg ccatcccgtc cggcaccagt tgcgtgcgtg gaaagatggc 2100

cgctcccggg ccctgttgca aggagctcaa aatggaggac gcggcagccc ggtggagcgg 2160

gcgggtgagt cacccacaca aaggaagagg gcctggtccc tcaccggctg ctgcttcctg 2220

tgaccccgtg gtcctatcgg ccgcaatagt cacctcgggc ttttgagcac ggctagtcgc 2280

ggcgggggga ggggatgtaa tggcgttgga gtttgttcac atttggtggg tggagactag 2340

tcaggccagc ctggcgctgg aagtcatttt tggaatttgt ccccttgagt tttgagcgga 2400

gctaattctc gggcttctta gcggttcaaa ggtatctttt aaaccctttt ttaggtgttg 2460

tgaaaaccac cgctaattca aagcaagccg ccacc 2495

<210> 729
<211> 1929
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 729
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaattcgt ttatcggcca ccgaggccaa gatctggccg 720

ccagcacatc gcccacagtc cccgagaagt tgggaggggt cggcaattga accggtgcct 780

agagaaggtg gcgcggggta aactgggaaa gtgatgtcgt gtactggctc cgccttttc 840

ccgagggtgg gggagaaccg tatataagtg cagtagtcgc cgtgaacgtt ctttttcgca 900

acgggtttgc cgccagaaca caggtaagtg ccgtgtgtgg ttcccgcggg cctggcctct 960

ttacgggtta tggcccttgc gtgccttgaa ttacttccac ctggctccag tacgtgattc 1020

ttgatcccga gctggagcca ggggcgggcc ttgcgcttta ggagcccctt cgcctcgtgc 1080

ttgagttgag gcctggcctg ggcgctgggg ccgccgcgtg cgaatctggt ggcaccttcg 1140

cgcctgtctc gctgctttcg ataagtctct agccatttaa aatttttgat gacgtgctgc 1200

gacgcttttt ttctggcaag atagtcttgt aaatgcgggc caggatctgc acactggtat 1260

ttcggttttt gggcccgcgg ccggcgacgg ggcccgtgcg tcccagcgca catgttcggc 1320

gaggcggggc ctgcgagcgc ggccaccgag aatcggacgg gggtagtctc aagctggccg 1380

gcctgctctg gtgcctggcc tcgcgccgcc gtgtatcgcc ccgccctggg cggcaaggct 1440

ggcccggtcg gcaccagttg cgtgagcgga aagatggccg cttcccggcc ctgctccagg 1500

gggctcaaaa tggaggacgc ggcgctcggg agagcgggcg ggtgagtcac ccacacaaag 1560

gaaaagggcc tttccgtcct cagccgtcgc ttcatgtgac tccacggagt accgggcgcc 1620

gtccaggcac ctcgattagt tctggagctt ttggagtacg tcgtctttag gttgggggga 1680

ggggttttat gcgatggagt ttccccacac tgagtgggtg gagactgaag ttaggccagc 1740

ttggcacttg atgtaattct ccttggaatt tggccttttt gagtttggat cttggttcat 1800

tctcaagcct cagacagtgg ttcaaagttt ttttcttcca tttcaggtgt cgtgaacacc 1860

atctattgct tagcttcctt cttctttttc ctagaagctc agaataaacg ctcaactttg 1920

gccgccacc 1929

<210> 730
<211> 2529
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 730
atcgggggag gctaactgaa acacggaagg agacaatacc ggaaggaacc cgcgctatga 60

cggcaataaa aagacagaat aaaacgcacg ggtgttgggt cgtttgttca taaacgcggg 120

gttcggtccc agggctggca ctctgtcgat accccaccga gtccccattg gggccaatac 180

gcccgcgttt cttccttttc cccaccccac cccccaagtt cgggtgaagg cccagggctc 240

gcagccaacg tcggggcggc aggccctgcc atagaaatcg ataatatatg gtagggttca 300

tagccagagt aacctttttt tttaattttt attttatttt atttttgagt cgggcgcgcc 360

aaaatgaagt gaagttccta tactttctag agcgagctca cggggacagc ccccccccaa 420

agcccccagg gatgtaatta cgtccctccc ccgctagggg gcagcagcga gccgcccggg 480

gctccgctcc ggtccggcgc tccccccgca tccccgagcc ggcagcgtgc ggggacagcc 540

cgggcacggg gaaggtggca cgggatcgct ttcctctgaa cgcttctcgc tgctctttga 600

gcctgcagac acctgggggg atacggggaa aaagctttag gctgaaagag agatttagaa 660

tgacaggcga gctcacgggg acagcccccc cccaaagccc ccagggatgt aattacgtcc 720

ctcccccgct agggggcagc agcgagccgc ccggggctcc gctccggtcc ggcgctcccc 780

ccgcatcccc gagccggcag cgtgcgggga cagcccgggc acggggaagg tggcacggga 840

tcgctttcct ctgaacgctt ctcgctgctc tttgagcctg cagacacctg gggggatacg 900

gggaaaaagc ttgaaacttg atctgtcgcc gcaattcaag cttcgtgagg ctccggtgcc 960

cgtcagtgac ctgctatact ctggagacga gcggggctga cgtcgggagg tggcctccgt 1020

gggaagggac acccggatct tgacacagcc ttggcagcgg agtaaggaag agtagggata 1080

gattctggcc gccctcttgg ccagcttctc gccgccccac cctccgctag ggccaagagt 1140

aattcataca aaaggaggga tcgccttcgc ctggggaagt cccagggacc gtcgctaaat 1200

tctcataacc cataatcccg gtacccgccc caccacagtg cgaggagcat gcgctcaggg 1260

ctgagcgcgg ggagagcaga gcacacaagc tcatagaccc tggtcgtggg gggaggggcg 1320

cactgagcgg gggggggggg ggtgatgggg gggaggaccg gggagctggc gcggggcaaa 1380

ctgggaaagc ggtgtcgtgt gctggctccg ccctcttccc gagggtgggg gagaacggta 1440

tataagtgcg gcagtcgcct tggacgttcc tttttcgcaa cgggtttgcc gtcagaacgc 1500

aggtgagggg cgggtgtggc ttccgcgggc cgccgagctg gaggtcctgc tccgagcggg 1560

ccgggccccg ctgtcgtcgg cggggattag ctgcgagcat tcccgcttcg agttgcgggc 1620

ggcgcgggag gcagagtgcg aggcctagcg gcaaccccgt agcctcgcct cgtgtccggc 1680

ttgaggccta gcgtggtgtc cgcgccgccg ccgcgtgcta ctccggccgc actctggtct 1740

ttttttttttt tgttgttgtt gccctgctgc cttcgattgc cgttcagcaa taggggctaa 1800

caaagggagg gtgcggggct tgctcgcccg gagcccggag aggtcatggt tggggaggaa 1860

tggagggaca ggagtggcgg ctggggcccg cccgccttcg gagcacatgt ccgacgccac 1920

ctggatgggg cgaggcctgg ggtttttccc gaagcaacca ggctggggtt agcgtgccga 1980

ggccatgtgg ccccagcacc cggcacgatc tggcttggcg gcgccgcgtt gccctgcctc 2040

cctaactagg gtgaggccat cccgtccggc accagttgcg tgcgtggaaa gatggccgct 2100

cccgggccct gttgcaagga gctcaaaatg gaggacgcgg cagcccggtg gagcgggcgg 2160

gtgagtcacc cacacaaagg aagagggcct ggtccctcac cggctgctgc ttcctgtgac 2220

cccgtggtcc tatcggccgc aatagtcacc tcgggctttt gagcacggct agtcgcggcg 2280

gggggagggg atgtaatggc gttggagttt gttcacattt ggtgggtgga gactagtcag 2340

gccagcctgg cgctggaagt cattttgga atttgtcccc ttgagttttg agcggagcta 2400

attctcgggc ttcttagcgg ttcaaaggta tcttttaaac cctttttag gtgttgtgaa 2460

aaccaccgct aaagcttgct tgttcttttt gcagaagctc agaataaacg ctcaactttg 2520

gccgccacc 2529

<210> 731
<211> 2494
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 731
aaatcggggg aggctaactg aaacacggaa ggagacaata ccggaaggaa cccgcgctat 60

gacggcaata aaaagacaga ataaaacgca cgggtgttgg gtcgtttgtt cataaacgcg 120

gggttcggtc ccagggctgg cactctgtcg ataccccacc gagtccccat tggggccaat 180

acgcccgcgt ttcttccttt tccccacccc acccccaag ttcgggtgaa ggcccagggc 240

tcgcagccaa cgtcggggcg gcaggccctg ccatagaaat cgataatata tggtagggtt 300

catagccaga gtaacctttt tttttaattt ttatttttatt ttatttttga gtcgggcgcg 360

ccaaaatgaa gtgaagttcc tatactttct agagcgagct cacggggaca gccccccccc 420

aaagccccca gggatgtaat tacgtccctc ccccgctagg gggcagcagc gagccgcccg 480

gggctccgct ccggtccggc gctcccccg catccccgag ccggcagcgt gcggggacag 540

cccgggcacg gggaaggtgg cacgggatcg ctttcctctg aacgcttctc gctgctcttt 600

gagcctgcag acacctgggg ggatacgggg aaaaagcttt aggctgaaag agagatttag 660

aatgacaggc gagctcacgg ggacagcccc ccccccaaag cccccaggga tgtaattacg 720

tccctccccc gctaggggggc agcagcgagc cgcccggggc tccgctccgg tccggcgctc 780

ccccgcatc cccgagccgg cagcgtgcgg ggacagcccg ggcacgggga aggtggcacg 840

ggatcgcttt cctctgaacg cttctcgctg ctctttgagc ctgcagacac ctgggggat 900

acggggaaaa agcttgaaac ttgatctgtc gccgcaattc aagcttcgtg aggctccggt 960

gcccgtcagt gacctgctat actctggaga cgagcggggc tgacgtcggg aggtggcctc 1020

cgtgggaagg gacacccgga tcttgacaca gccttggcag cggagtaagg aagagtaggg 1080

atagattctg gccgccctct tggccagctt ctcgccgccc caccctccgc tagggccaag 1140

agtaattcat acaaaaggag ggatcgcctt cgcctgggga agtcccaggg accgtcgcta 1200

aattctcata acccataatc ccggtacccg ccccaccaca gtgcgaggag catgcgctca 1260

gggctgagcg cggggagagc agagcacaca agctcataga ccctggtcgt gggggggaggg 1320

gcgcactgag cgggggggggg gggggtgatg gggggggagga ccggggagct ggcgcggggc 1380

aaactgggaa agcggtgtcg tgtgctggct ccgccctctt cccgagggtg ggggagaacg 1440

gtatataagt gcggcagtcg ccttggacgt tccttttttcg caacgggttt gccgtcagaa 1500

cgcaggtgag gggcgggtgt ggcttccgcg ggccgccgag ctggaggtcc tgctccgagc 1560

gggccgggcc ccgctgtcgt cggcggggat tagctgcgag cattcccgct tcgagttgcg 1620

ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc 1680

ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg ctactccggc cgcactctgg 1740

tctttttttt ttttgttgtt gttgccctgc tgccttcgat tgccgttcag caataggggc 1800

taacaaaggg agggtgcggg gcttgctcgc ccggagcccg gagaggtcat ggttggggag 1860

gaatggaggg acaggagtgg cggctggggc ccgcccgcct tcggagcaca tgtccgacgc 1920

cacctggatg gggcgaggcc tggggttttt cccgaagcaa ccaggctggg gttagcgtgc 1980

cgaggccatg tggccccagc acccggcacg atctggcttg gcggcgccgc gttgccctgc 2040

ctccctaact agggtgaggc catcccgtcc ggcaccagtt gcgtgcgtgg aaagatggcc 2100

gctcccgggc cctgttgcaa ggagctcaaa atggaggacg cggcagcccg gtggagcggg 2160

cgggtgagtc acccacacaa aggaagaggg cctggtccct caccggctgc tgcttcctgt 2220

gaccccgtgg tcctatcggc cgcaatagtc acctcgggct tttgagcacg gctagtcgcg 2280

gcgggggggag gggatgtaat ggcgttggag tttgttcaca tttggtgggt ggagactagt 2340

caggccagcc tggcgctgga agtcattttt ggaatttgtc cccttgagtt ttgagcggag 2400

ctaattctcg ggcttcttag cggttcaaag gtatctttta aacccttttt taggtgttgt 2460

gaaaaccacc gctaattcaa agcaagccgc cacc 2494

<210> 732
<211> 2905
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 732
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaaaatcgat aatatatggt agggttcata gccagagtaa 720

cctttttttt taatttttat tttattttat ttttgagtcg ggcgcgccaa aatgaagtga 780

agttcctata ctttctagag cgagctcacg gggacagccc ccccccaaag cccccaggga 840

tgtaattacg tccctccccc gctaggggggc agcagcgagc cgcccggggc tccgctccgg 900

tccggcgctc cccccgcatc cccgagccgg cagcgtgcgg ggacagcccg ggcacgggga 960

aggtggcacg ggatcgcttt cctctgaacg cttctcgctg ctctttgagc ctgcagacac 1020

ctgggggggat acggggaaaa agctttaggc tgaaagagag atttagaatg acaggcgagc 1080

tcacggggac agcccccccc caaagccccc agggatgtaa ttacgtccct cccccgctag 1140

ggggcagcag cgagccgccc ggggctccgc tccggtccgg cgctcccccc gcatccccga 1200

gccggcagcg tgcggggaca gcccgggcac ggggaaggtg gcacgggatc gctttcctct 1260

gaacgcttct cgctgctctt tgagcctgca gacacctggg gggatacggg gaaaaagctt 1320

gaaacttgat ctgtcgccgc aattcaagct tcgtgaggct ccggtgcccg tcagtgacct 1380

gctatactct ggagacgcct ctcccggcca gaggagcaag gtatgcggga ggcgaccagg 1440

aggatagcgg ggctgacgtc gggaggtggc ctccgtggga aggacacccg gatcttgaca 1500

cagccttggc agcggagtca ggaagagtag gggtaggttc tggacgccct cttggccagc 1560

tcatcgccgc cccaccctct gctggagcac agagtaattc atacaaaagg agggatcgcc 1620

ttcgcaaggg gagagcccag ggaccgtccc taaattctca cagacccaaa tccctgtagc 1680

cgccccacga cagcgcgagg agcatgcgcc cagggctgag cgcgggtaga tcagagcaca 1740

caagctcaca gtccccggcg gtgggggggag gggcgcgctg agcgggggcc agggagctgg 1800

cgcggggcaa actgggaaag tggtgtcgtg tgctggctcc gccctcttcc cgagggtggg 1860

ggagaacggt atataagtgc ggtagtcgcc ttggacgttc tttttcgcaa cgggtttgcc 1920

gtcagaacgc aggtgagtgg cgggtgtggc ttccgcgggc cccggagctg gagccctgct 1980

ctgagcgggc cgggctgata tgcgagtgtc gtccgcaggg tttagctgtg agcattccca 2040

cttcgagtgg cgggcggtgc gggggtgaga gtgcgaggcc tagcggcaac cccgtagcct 2100

cgcctcgtgt ccggcttgag gcctagcgtg gtgtccgccg ccgcgtgcca ctccggccgc 2160

actatgcgtt ttttgtcctt gctgccctcg attgccttcc agcagcatgg gctaacaaag 2220

ggagggtgtg gggctcactc ttaaggagcc catgaagctt acgttggata ggaatggaag 2280

ggcaggaggg gcgactgggg cccgcccgcc ttcggagcac atgtccgacg ccacctggat 2340

ggggcgaggc ctgtggcttt ccgaagcaat cgggcgtgag tttagcctac ctgggccatg 2400

tggccctagc actgggcacg gtctggcctg gcggtgccgc gttcccttgc ctcccaacaa 2460

gggtgaggcc gtcccgcccg gcaccagttg cttgcgcgga aagatggccg ctcccggggc 2520

cctgttgcaa ggagctcaaa atggaggacg cggcagcccg gtggagcggg cgggtgagtc 2580

acccacacaa aggaagaggg ccttgcccct cgccggccgc tgcttcctgt gaccccgtgg 2640

tctatcggcc gcatagtcac ctcgggcttc tcttgagcac cgctcgtcgc ggcgggggga 2700

ggggatctaa tggcgttgga gtttgttcac atttggtggg tggagactag tcaggccagc 2760

ctggcgctgg aagtcattct tggaatttgc ccctttgagt ttggagcgag gctaattctc 2820

aagcctctta gcggttcaaa ggtattttct aaacccgttt ccaggtgttg tgaaagccac 2880

cgctaattca aagcaagccg ccacc 2905

<210> 733
<211> 2937
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 733
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaaaatcgat aatatatggt agggttcata gccagagtaa 720

cctttttttt taatttttat tttattttat ttttgagtcg ggcgcgccaa aatgaagtga 780

agttcctata ctttctagag cgagctcacg gggacagccc ccccccaaag cccccaggga 840

tgtaattacg tccctccccc gctaggggggc agcagcgagc cgcccggggc tccgctccgg 900

tccggcgctc cccccgcatc cccgagccgg cagcgtgcgg ggacagcccg ggcacgggga 960

aggtggcacg ggatcgcttt cctctgaacg cttctcgctg ctctttgagc ctgcagacac 1020

ctgggggggat acggggaaaa agctttaggc tgaaagagag atttagaatg acaggcgagc 1080

tcacggggac agcccccccc caaagccccc agggatgtaa ttacgtccct cccccgctag 1140

ggggcagcag cgagccgccc ggggctccgc tccggtccgg cgctcccccc gcatccccga 1200

gccggcagcg tgcggggaca gcccgggcac ggggaaggtg gcacgggatc gctttcctct 1260

gaacgcttct cgctgctctt tgagcctgca gacacctggg gggatacggg gaaaaagctt 1320

gaaacttgat ctgtcgccgc aattcaagct tcgtgaggct ccggtgcccg tcagtgacct 1380

gctatactct ggagacgagc ggggctgacg tcgggaggtg gcctccgtgg gaagggacac 1440

ccggatcttg acacagcctt ggcagcggag taaggaagag tagggataga ttctggccgc 1500

cctcttggcc agcttctcgc cgccccaccc tccgctaggg ccaagagtaa ttcatacaaa 1560

aggagggatc gccttcgcct ggggaagtcc cagggaccgt cgctaaattc tcataaccca 1620

taatcccggt acccgcccca ccacagtgcg aggagcatgc gctcagggct gagcgcgggg 1680

agagcagagc acacaagctc atagaccctg gtcgtggggg gaggggcgca ctgagcgggg 1740

ggggggggggg tgatgggggg gaggaccggg gagctggcgc ggggcaaact gggaaagcgg 1800

tgtcgtgtgc tggctccgcc ctcttcccga gggtggggga gaacggtata taagtgcggc 1860

agtcgccttg gacgttcctt tttcgcaacg ggtttgccgt cagaacgcag gtgaggggcg 1920

ggtgtggctt ccgcgggccg ccgagctgga ggtcctgctc cgagcgggcc gggccccgct 1980

gtcgtcggcg gggattagct gcgagcattc ccgcttcgag ttgcgggcgg cgcgggaggc 2040

agagtgcgag gcctagcggc aaccccgtag cctcgcctcg tgtccggctt gaggcctagc 2100

gtggtgtccg cgccgccgcc gcgtgctact ccggccgcac tctggtcttt ttttttttg 2160

ttgttgttgc cctgctgcct tcgattgccg ttcagcaata ggggctaaca aagggagggt 2220

gcggggcttg ctcgcccgga gcccggagag gtcatggttg gggaggaatg gagggacagg 2280

agtggcggct ggggcccgcc cgccttcgga gcacatgtcc gacgccacct ggatggggcg 2340

aggcctgggg tttttcccga agcaaccagg ctggggttag cgtgccgagg ccatgtggcc 2400

ccagcacccg gcacgatctg gcttggcggc gccgcgttgc cctgcctccc taactagggt 2460

gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga tggccgctcc cgggccctgt 2520

tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt gagtcaccca 2580

cacaaaggaa gagggcctgg tccctcaccg gctgctgctt cctgtgaccc cgtggtccta 2640

tcggccgcaa tagtcacctc gggcttttga gcacggctag tcgcggcggg gggaggggat 2700

gtaatggcgt tggagtttgt tcacatttgg tgggtggaga ctagtcaggc cagcctggcg 2760

ctggaagtca tttttggaat ttgtcccctt gagttttgag cggagctaat tctcgggctt 2820

cttagcggtt caaaggtatc ttttaaaccc ttttttaggt gttgtgaaaa ccaccgctaa 2880

agcttgcttg ttctttttgc agaagctcag aataaacgct caactttggc cgccacc 2937

<210> 734
<211> 2859
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 734
caccgaggga cctgagcgag tccgcatcga ccggatcgga aaacctctcg agaaaggcgt 60

ctaaccagtc acagtcgcaa ggtaggctga gcaccgtggc gggcggcagc gggtggcggt 120

cggggttgtt tctggcggag gtgctgctga tgatgtaatt aaagtaggcg gtcttgagag 180

ggcggatggt cgaggtgagg tgtggcaggc ttgagatcca gctgttgggg tgagtactcc 240

ctctcaaaag cgggcattac ttctgcgcta agattgtcag tttccaaaaa cgaggaggat 300

ttgatattca cctggcccga tctggccata cacttgagtg acaatgacat ccactttgcc 360

tttctctcca caggtgtcca ctcccaggtc caagtttaaa gccgccacca tcgggggagg 420

ctaactgaaa cacggaagga gacaataccg gaaggaaccc gcgctatgac ggcaataaaa 480

agacagaata aaacgcacgg gtgttgggtc gtttgttcat aaacgcgggg ttcggtccca 540

gggctggcac tctgtcgata ccccaccgag tccccattgg ggccaatacg cccgcgtttc 600

ttccttttcc ccaccccacc ccccaagttc gggtgaaggc ccagggctcg cagccaacgt 660

cggggcggca ggccctgcca tagaaatcga taatatatgg tagggttcat agccagagta 720

acctttttt ttaattttta ttttatttta tttttgagtc gggcgcgcca aaatgaagtg 780

aagttcctat actttctaga gcgagctcac ggggacagcc ccccccccaaa gcccccaggg 840

atgtaattac gtccctcccc cgctaggggg cagcagcgag ccgcccgggg ctccgctccg 900

gtccggcgct ccccccgcat ccccgagccg gcagcgtgcg gggacagccc gggcacgggg 960

aaggtggcac gggatcgctt tcctctgaac gcttctcgct gctctttgag cctgcagaca 1020

cctgggggga tacggggaaa aagctttagg ctgaaagaga gatttagaat gacaggcgag 1080

ctcacgggga cagcccccc ccaaagcccc cagggatgta attacgtccc tcccccgcta 1140

gggggcagca gcgagccgcc cggggctccg ctccggtccg gcgctccccc cgcatccccg 1200

agccggcagc gtgcggggac agcccgggca cggggaaggt ggcacgggat cgctttcctc 1260

tgaacgcttc tcgctgctct ttgagcctgc agacacctgg ggggatacgg ggaaaaagct 1320

tgaaacttga tctgtcgccg caattcaagc ttcgtgaggc tccggtgccc gtcagtgacc 1380

tgctatactc tggagacgag cggggctgac gtcgggaggt ggcctccgtg ggaagggaca 1440

cccggatctt gacacagcct tggcagcgga gtaaggaaga gtagggatag attctggccg 1500

ccctcttggc cagcttctcg ccgccccacc ctccgctagg gccaagagta attcatacaa 1560

aaggagggat cgccttcgca aggggagagc ccagggaccg tccctaaatt ctcacagacc 1620

caaatccctg tagccgcccc acgacagcgc gaggagcatg cgctcagggc tgagcgcggg 1680

gagagcagag cacacaagct catagaccct ggtcgtgggg gggaggaccg gggagctggc 1740

gcggggcaaa ctgggaaagc ggtgtcgtgt gctggctccg ccctcttccc gagggtgggg 1800

gagaacggta tataagtgcg gcagtcgcct tggacgttct ttttcgcaac gggtttgccg 1860

tcagaacgca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg aggtcctgct 1920

ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt cccgcttcga 1980

gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta gcctcgcctc 2040

gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac tccggccgca 2100

ctctggtctt ttttttttg ttgttgttgc cctgctgcct tcgattgccg ttcagcaata 2160

ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag gtcatggttg 2220

gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga gcacatgtcc 2280

gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg ctggggttag 2340

cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc gccgcgttgc 2400

cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga 2460

tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga 2520

gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg gctgctgctt 2580

cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga gcacggctag 2640

tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg tgggtggaga 2700

ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt gagttttgag 2760

cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc ttttttaggt 2820

gttgtgaaaa ccaccgctaa ttcaaagcaa gccgccacc 2859

<210> 735
<211> 2914
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 735
ccgcctagga ccaccgaggg acctgagcga gtccgcatcg accggatcgg aaaacctctc 60

gagaaaggcg tctaaccagt cacagtcgca aggtaggctg agcaccgtgg cgggcggcag 120

cgggtggcgg tcggggttgt ttctggcgga ggtgctgctg atgatgtaat taaagtaggc 180

ggtcttgaga gggcggatgg tcgaggtgag gtgtggcagg cttgagatcc agctgttggg 240

gtgagtactc cctctcaaaa gcgggcatta cttctgcgct aagattgtca gtttccaaaa 300

acgaggagga tttgatattc acctggcccg atctggccat acacttgagt gacaatgaca 360

tccactttgc ctttctctcc acaggtgtcc actcccaggt ccaagtttaa agccgccacc 420

gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc gctatgacgg 480

caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa acgcggggtt 540

cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg ccaatacgcc 600

cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc agggctcgca 660

gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta gggttcatag 720

ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg gcgcgccaaa 780

atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc cccccaaagc 840

ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc gcccggggct 900

ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg gacagcccgg 960

gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc tctttgagcc 1020

tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga tttagaatga 1080

caggcgagct cacggggaca gccccccccc aaagccccca gggatgtaat tacgtccctc 1140

ccccgctagg gggcagcagc gagccgcccg gggctccgct ccggtccggc gctccccccg 1200

catccccgag ccggcagcgt gcggggacag cccgggcacg gggaaggtgg cacgggatcg 1260

ctttcctctg aacgcttctc gctgctcttt gagcctgcag acacctgggg ggatacgggg 1320

aaaaagcttg aaacttgatc tgtcgccgca attcaagctt cgtgaggctc cggtgcccgt 1380

cagtgacctg ctatactctg gagacgcctc tcccggccag aggagcaagg tatgcgggag 1440

gcgaccagga ggatagcggg gctgacgtcg ggaggtggcc tccgtgggaa ggacacccgg 1500

atcttgacac agccttggca gcggagtcag gaagagtagg ggtaggttct ggacgccctc 1560

ttggccagct catcgccgcc ccaccctctg ctggagcaca gagtaattca tacaaaagga 1620

gggatcgcct tcgcaagggg agagcccagg gaccgtccct aaattctcac agacccaaat 1680

ccctgtagcc gccccacgac agcgcgagga gcatgcgccc agggctgagc gcgggtagat 1740

cagagcacac aagctcacag tccccggcgg tgggggggagg ggcgcgctga gcgggggcca 1800

gggagctggc gcggggcaaa ctgggaaagt ggtgtcgtgt gctggctccg ccctcttccc 1860

gagggtgggg gagaacggta tataagtgcg gtagtcgcct tggacgttct ttttcgcaac 1920

gggtttgccg tcagaacgca ggtgagtggc gggtgtggct tccgcgggcc ccggagctgg 1980

agccctgctc tgagcgggcc gggctgatat gcgagtgtcg tccgcagggt ttagctgtga 2040

gcattcccac ttcgagtggc gggcggtgcg ggggtgagag tgcgaggcct agcggcaacc 2100

ccgtagcctc gcctcgtgtc cggcttgagg cctagcgtgg tgtccgccgc cgcgtgccac 2160

tccggccgca ctatgcgttt tttgtccttg ctgccctcga ttgccttcca gcagcatggg 2220

ctaacaaagg gagggtgtgg ggctcactct taaggagccc atgaagctta cgttggatag 2280

gaatggaagg gcaggagggg cgactggggc ccgcccgcct tcggagcaca tgtccgacgc 2340

cacctggatg gggcgaggcc tgtggctttc cgaagcaatc gggcgtgagt ttagcctacc 2400

tgggccatgt ggccctagca ctgggcacgg tctggcctgg cggtgccgcg ttcccttgcc 2460

tcccaacaag ggtgaggccg tcccgcccgg caccagttgc ttgcgcggaa agatggccgc 2520

tcccggggcc ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg tggagcgggc 2580

gggtgagtca cccacacaaa ggaagagggc cttgcccctc gccggccgct gcttcctgtg 2640

accccgtggt ctatcggccg catagtcacc tcgggcttct cttgagcacc gctcgtcgcg 2700

gcgggggggag gggatctaat ggcgttggag tttgttcaca tttggtgggt ggagactagt 2760

caggccagcc tggcgctgga agtcattctt ggaatttgcc cctttgagtt tggagcgagg 2820

ctaattctca agcctcttag cggttcaaag gtattttcta aacccgtttc caggtgttgt 2880

gaaagccacc gctaattcaa agcaagccgc cacc 2914

<210> 736
<211> 2527
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 736
caccgaggga cctgagcgag tccgcatcga ccggatcgga aaacctctcg agaaaggcgt 60

ctaaccagtc acagtcgcaa ggtaggctga gcaccgtggc gggcggcagc gggtggcggt 120

cggggttgtt tctggcggag gtgctgctga tgatgtaatt aaagtaggcg gtcttgagag 180

ggcggatggt cgaggtgagg tgtggcaggc ttgagatcca gctgttgggg tgagtactcc 240

ctctcaaaag cgggcattac ttctgcgcta agattgtcag tttccaaaaa cgaggaggat 300

ttgatattca cctggcccga tctggccata cacttgagtg acaatgacat ccactttgcc 360

tttctctcca caggtgtcca ctcccaggtc caagtttaaa gccgccaccg ggggaggcta 420

actgaaacac ggaaggagac aataccggaa ggaacccgcg ctatgacggc aataaaaaga 480

cagaataaaa cgcacgggtg ttgggtcgtt tgttcataaa cgcggggttc ggtcccaggg 540

ctggcactct gtcgataccc caccgagtcc ccattggggc caatacgccc gcgtttcttc 600

cttttcccca ccccaccccc caagttcggg tgaaggccca gggctcgcag ccaacgtcgg 660

ggcggcaggc cctgccatag aaatcgataa tatatggtag ggttcatagc cagagtaacc 720

ttttttttta atttttattt tattttattt ttgagtcggg cgcgccaaaa tgaagtgaag 780

ttcctatact ttctagagcg agctcacggg gacagccccc ccccaaagcc cccagggatg 840

taattacgtc cctcccccgc taggggggcag cagcgagccg cccggggctc cgctccggtc 900

cggcgctccc cccgcatccc cgagccggca gcgtgcgggg acagcccggg cacggggaag 960

gtggcacggg atcgctttcc tctgaacgct tctcgctgct ctttgagcct gcagacacct 1020

gggggggatac ggggaaaaag ctttaggctg aaagagagat ttagaatgac agagcggggc 1080

tgacgtcggg aggtggcctc cgtgggaagg gacacccgga tcttgacaca gccttggcag 1140

cggagtaagg aagagtaggg atagattctg gccgccctct tggccagctt ctcgccgccc 1200

caccctccgc tagggccaag agtaattcat acaaaaggag ggatcgcctt cgcaagggga 1260

gagcccaggg accgtcccta aattctcaca gacccaaatc cctgtagccg ccccacgaca 1320

gcgcgaggag catgcgctca gggctgagcg cggggagagc agagcacaca agctcataga 1380

ccctggtcgt gggggggagg accggggagc tggcgcgggg caaactggga aagcggtgtc 1440

gtgtgctggc tccgccctct tcccgagggt gggggagaac ggtatataag tgcggcagtc 1500

gccttggacg ttctttttcg caacgggttt gccgtcagaa cgcaggtgag gggcgggtgt 1560

ggcttccgcg ggccgccgag ctggaggtcc tgctccgagc gggccgggcc ccgctgtcgt 1620

cggcggggat tagctgcgag cattcccgct tcgagttgcg ggcggcgcgg gaggcagagt 1680

gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc ggcttgaggc ctagcgtggt 1740

gtccgcgccg ccgccgcgtg ctactccggc cgcactctgg tctttttttt ttttgttgtt 1800

gttgccctgc tgccttcgat tgccgttcag caataggggc taacaaaggg agggtgcggg 1860

gcttgctcgc ccggagcccg gagaggtcat ggttggggag gaatggaggg acaggagtgg 1920

cggctggggc ccgcccgcct tcggagcaca tgtccgacgc cacctggatg gggcgaggcc 1980

tggggttttt cccgaagcaa ccaggctggg gttagcgtgc cgaggccatg tggccccagc 2040

acccggcacg atctggcttg gcggcgccgc gttgccctgc ctccctaact agggtgaggc 2100

catcccgtcc ggcaccagtt gcgtgcgtgg aaagatggcc gctcccgggc cctgttgcaa 2160

ggagctcaaa atggaggacg cggcagcccg gtggagcggg cgggtgagtc acccacacaa 2220

aggaagaggg cctggtccct caccggctgc tgcttcctgt gaccccgtgg tcctatcggc 2280

cgcaatagtc acctcgggct tttgagcacg gctagtcgcg gcgggggggag gggatgtaat 2340

ggcgttggag tttgttcaca tttggtgggt ggagactagt caggccagcc tggcgctgga 2400

agtcattttt ggaatttgtc cccttgagtt ttgagcggag ctaattctcg ggcttcttag 2460

cggttcaaag gtatctttta aacccttttt taggtgttgt gaaaaccacc gctaattcaa 2520

agcaacc 2527

<210> 737
<211> 2747
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 737
ggccgggaac ggtgcattgg aacgcggatt ccccgtgcca agagtgaccc tggcagaact 60

cggtaagtct gttgacatgt atgtgatgta tactaacctg catgggacgt ggatttactt 120

gtgtatgtca gatagagtaa agattaactc ttgcatgtga gcggggcatc gagatagcga 180

taaatgagtc aggaggacgg agcctctgct aaccatgttc atgccttctt ctttttccta 240

cagctcctgg gcaacgtgct ggttattgtg ctgtctcatc attttggcaa agaattcatc 300

gggggaggct aactgaaaca cggaaggaga caataccgga aggaacccgc gctatgacgg 360

caataaaaag acagaataaa acgcacgggt gttgggtcgt ttgttcataa acgcggggtt 420

cggtcccagg gctggcactc tgtcgatacc ccaccgagtc cccattgggg ccaatacgcc 480

cgcgtttctt ccttttcccc accccacccc ccaagttcgg gtgaaggccc agggctcgca 540

gccaacgtcg gggcggcagg ccctgccata gaaatcgata atatatggta gggttcatag 600

ccagagtaac ctttttttt aatttttatt ttattttatt tttgagtcgg gcgcgccaaa 660

atgaagtgaa gttcctatac tttctagagc gagctcacgg ggacagcccc cccccaaagc 720

ccccagggat gtaattacgt ccctcccccg ctaggggggca gcagcgagcc gcccggggct 780

ccgctccggt ccggcgctcc ccccgcatcc ccgagccggc agcgtgcggg gacagcccgg 840

gcacggggaa ggtggcacgg gatcgctttc ctctgaacgc ttctcgctgc tctttgagcc 900

tgcagacacc tgggggggata cggggaaaaa gctttaggct gaaagagaga tttagaatga 960

caggcgagct cacggggaca gccccccccc aaagccccca gggatgtaat tacgtccctc 1020

ccccgctagg gggcagcagc gagccgcccg gggctccgct ccggtccggc gctccccccg 1080

catccccgag ccggcagcgt gcggggacag cccgggcacg gggaaggtgg cacgggatcg 1140

ctttcctctg aacgcttctc gctgctcttt gagcctgcag acacctgggg ggatacgggg 1200

aaaaagcttg aaacttgatc tgtcgccgca attcaagctt cgtgaggctc cggtgcccgt 1260

cagtgacctg ctatactctg gagacgagcg gggctgacgt cgggaggtgg cctccgtggg 1320

aagggacacc cggatcttga cacagccttg gcagcggagt aaggaagagt agggatagat 1380

tctggccgcc ctcttggcca gcttctcgcc gccccaccct ccgctagggc caagagtaat 1440

tcatacaaaa ggagggatcg ccttcgcaag gggagagccc agggaccgtc cctaaattct 1500

cacagaccca aatccctgta gccgccccac gacagcgcga ggagcatgcg ctcagggctg 1560

agcgcgggga gagcagagca cacaagctca tagaccctgg tcgtgggggg gaggaccggg 1620

gagctggcgc ggggcaaact gggaaagcgg tgtcgtgtgc tggctccgcc ctcttcccga 1680

gggtggggga gaacggtata taagtgcggc agtcgccttg gacgttcttt ttcgcaacgg 1740

gtttgccgtc agaacgcagg tgaggggcgg gtgtggcttc cgcgggccgc cgagctggag 1800

gtcctgctcc gagcgggccg ggccccgctg tcgtcggcgg ggattagctg cgagcattcc 1860

cgcttcgagt tgcgggcggc gcgggaggca gagtgcgagg cctagcggca accccgtagc 1920

ctcgcctcgt gtccggcttg aggcctagcg tggtgtccgc gccgccgccg cgtgctactc 1980

cggccgcact ctggtctttt ttttttgtt gttgttgccc tgctgccttc gattgccgtt 2040

cagcaatagg ggctaacaaa gggagggtgc ggggcttgct cgcccggagc ccggagaggt 2100

catggttggg gaggaatgga gggacaggag tggcggctgg ggcccgcccg ccttcggagc 2160

acatgtccga cgccacctgg atggggcgag gcctggggtt tttcccgaag caaccaggct 2220

ggggttagcg tgccgaggcc atgtggcccc agcacccggc acgatctggc ttggcggcgc 2280

cgcgttgccc tgcctcccta actagggtga ggccatcccg tccggcacca gttgcgtgcg 2340

tggaaagatg gccgctcccg ggccctgttg caaggagctc aaaatggagg acgcggcagc 2400

ccggtggagc gggcgggtga gtcacccaca caaaggaaga gggcctggtc cctcaccggc 2460

tgctgcttcc tgtgaccccg tggtcctatc ggccgcaata gtcacctcgg gcttttgagc 2520

acggctagtc gcggcggggg gaggggatgt aatggcgttg gagtttgttc acatttggtg 2580

ggtggagact agtcaggcca gcctggcgct ggaagtcatt tttggaattt gtccccttga 2640

gttttgagcg gagctaattc tcgggcttct tagcggttca aaggtatctt ttaaaccctt 2700

ttttaggtgt tgtgaaaacc accgctaatt caaagcaagc cgccacc 2747

<210> 738
<211> 2415
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 738
ggccgggaac ggtgcattgg aacgcggatt ccccgtgcca agagtgaccc tggcagaact 60

cggtaagtct gttgacatgt atgtgatgta tactaacctg catgggacgt ggatttactt 120

gtgtatgtca gatagagtaa agattaactc ttgcatgtga gcggggcatc gagatagcga 180

taaatgagtc aggaggacgg agcctctgct aaccatgttc atgccttctt ctttttccta 240

cagctcctgg gcaacgtgct ggttattgtg ctgtctcatc attttggcaa agaattcggg 300

ggaggctaac tgaaacacgg aaggagacaa taccggaagg aacccgcgct atgacggcaa 360

taaaaagaca gaataaaacg cacgggtgtt gggtcgtttg ttcataaacg cggggttcgg 420

tcccagggct ggcactctgt cgatacccca ccgagtcccc attggggcca atacgcccgc 480

gtttcttcct tttccccacc ccacccccca agttcgggtg aaggcccagg gctcgcagcc 540

aacgtcgggg cggcaggccc tgccatagaa atcgataata tatggtaggg ttcatagcca 600

gagtaacctt ttttttaat ttttatttta ttttattttt gagtcgggcg cgccaaaatg 660

aagtgaagtt cctatacttt ctagagcgag ctcacgggga cagccccccc ccaaagcccc 720

cagggatgta attacgtccc tcccccgcta gggggcagca gcgagccgcc cggggctccg 780

ctccggtccg gcgctccccc cgcatccccg agccggcagc gtgcggggac agcccgggca 840

cggggaaggt ggcacgggat cgctttcctc tgaacgcttc tcgctgctct ttgagcctgc 900

agacacctgg ggggatacgg ggaaaaagct ttaggctgaa agagagattt agaatgacag 960

agcggggctg acgtcgggag gtggcctccg tgggaaggga cacccggatc ttgacacagc 1020

cttggcagcg gagtaaggaa gagtagggat agattctggc cgccctcttg gccagcttct 1080

cgccgcccca ccctccgcta gggccaagag taattcatac aaaaggaggg atcgccttcg 1140

caaggggaga gcccagggac cgtccctaaa ttctcacaga cccaaatccc tgtagccgcc 1200

ccacgacagc gcgaggagca tgcgctcagg gctgagcgcg gggagagcag agcacacaag 1260

ctcatagacc ctggtcgtgg gggggaggac cggggagctg gcgcggggca aactgggaaa 1320

gcggtgtcgt gtgctggctc cgccctcttc ccgagggtgg gggagaacgg tatataagtg 1380

cggcagtcgc cttggacgtt ctttttcgca acgggtttgc cgtcagaacg caggtgaggg 1440

gcgggtgtgg cttccgcggg ccgccgagct ggaggtcctg ctccgagcgg gccgggcccc 1500

gctgtcgtcg gcggggatta gctgcgagca ttcccgcttc gagttgcggg cggcgcggga 1560

ggcagagtgc gaggcctagc ggcaaccccg tagcctcgcc tcgtgtccgg cttgaggcct 1620

agcgtggtgt ccgcgccgcc gccgcgtgct actccggccg cactctggtc ttttttttt 1680

ttgttgttgt tgccctgctg ccttcgattg ccgttcagca ataggggcta acaaagggag 1740

ggtgcggggc ttgctcgccc ggagcccgga gaggtcatgg ttggggagga atggagggac 1800

aggagtggcg gctggggccc gcccgccttc ggagcacatg tccgacgcca cctggatggg 1860

gcgaggcctg gggtttttcc cgaagcaacc aggctggggt tagcgtgccg aggccatgtg 1920

gccccagcac ccggcacgat ctggcttggc ggcgccgcgt tgccctgcct ccctaactag 1980

ggtgaggcca tcccgtccgg caccagttgc gtgcgtggaa agatggccgc tcccgggccc 2040

tgttgcaagg agctcaaaat ggaggacgcg gcagcccggt ggagcgggcg ggtgagtcac 2100

ccacacaaag gaagagggcc tggtccctca ccggctgctg cttcctgtga ccccgtggtc 2160

ctatcggccg caatagtcac ctcgggcttt tgagcacggc tagtcgcggc gggggggaggg 2220

gatgtaatgg cgttggagtt tgttcacatt tggtgggtgg agactagtca ggccagcctg 2280

gcgctggaag tcatttttgg aatttgtccc cttgagtttt gagcggagct aattctcggg 2340

cttcttagcg gttcaaaggt atcttttaaa ccctttttta ggtgttgtga aaaccaccgc 2400

taattcaaag caacc 2415

<210> 739
<211> 2802
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 739
ccgcctagga cggccgggaa cggtgcattg gaacgcggat tccccgtgcc aagagtgacc 60

ctggcagaac tcggtaagtc tgttgacatg tatgtgatgt atactaacct gcatgggacg 120

tggatttact tgtgtatgtc agatagagta aagattaact cttgcatgtg agcggggcat 180

cgagatagcg ataaatgagt caggaggacg gagcctctgc taaccatgtt catgccttct 240

tctttttcct acagctcctg ggcaacgtgc tggttattgt gctgtctcat cattttggca 300

aagaattcgg gggaggctaa ctgaaacacg gaaggagaca ataccggaag gaacccgcgc 360

tatgacggca ataaaaagac agaataaaac gcacgggtgt tgggtcgttt gttcataaac 420

gcggggttcg gtcccagggc tggcactctg tcgatacccc accgagtccc cattggggcc 480

aatacgcccg cgtttcttcc ttttccccac cccacccccc aagttcgggt gaaggcccag 540

ggctcgcagc caacgtcggg gcggcaggcc ctgccataga aatcgataat atatggtagg 600

gttcatagcc agagtaacct tttttttaa tttttatttt attttatttt tgagtcgggc 660

gcgccaaaat gaagtgaagt tcctatactt tctagagcga gctcacgggg acagcccccc 720

cccaaagccc ccagggatgt aattacgtcc ctcccccgct agggggcagc agcgagccgc 780

ccggggctcc gctccggtcc ggcgctcccc ccgcatcccc gagccggcag cgtgcgggga 840

cagcccgggc acggggaagg tggcacggga tcgctttcct ctgaacgctt ctcgctgctc 900

tttgagcctg cagacacctg gggggatacg gggaaaaagc tttaggctga aagagagatt 960

tagaatgaca ggcgagctca cggggacagc ccccccccaa agcccccagg gatgtaatta 1020

cgtccctccc ccgctagggg gcagcagcga gccgcccggg gctccgctcc ggtccggcgc 1080

tccccccgca tccccgagcc ggcagcgtgc ggggacagcc cgggcacggg gaaggtggca 1140

cgggatcgct ttcctctgaa cgcttctcgc tgctctttga gcctgcagac acctgggggg 1200

atacggggaa aaagcttgaa acttgatctg tcgccgcaat tcaagcttcg tgaggctccg 1260

gtgcccgtca gtgacctgct atactctgga gacgcctctc ccggccagag gagcaaggta 1320

tgcgggaggc gaccaggagg atagcggggc tgacgtcggg aggtggcctc cgtgggaagg 1380

acacccggat cttgacacag ccttggcagc ggagtcagga agagtagggg taggttctgg 1440

acgccctctt ggccagctca tcgccgcccc accctctgct ggagcacaga gtaattcata 1500

caaaaggagg gatcgccttc gcaaggggag agcccaggga ccgtccctaa attctcacag 1560

acccaaatcc ctgtagccgc cccacgacag cgcgaggagc atgcgcccag ggctgagcgc 1620

gggtagatca gagcacacaa gctcacagtc cccggcggtg gggggagggg cgcgctgagc 1680

gggggccagg gagctggcgc ggggcaaact gggaaagtgg tgtcgtgtgc tggctccgcc 1740

ctcttcccga gggtggggga gaacggtata taagtgcggt agtcgccttg gacgttcttt 1800

ttcgcaacgg gtttgccgtc agaacgcagg tgagtggcgg gtgtggcttc cgcgggcccc 1860

ggagctggag ccctgctctg agcgggccgg gctgatatgc gagtgtcgtc cgcagggttt 1920

agctgtgagc attcccactt cgagtggcgg gcggtgcggg ggtgagagtg cgaggcctag 1980

cggcaacccc gtagcctcgc ctcgtgtccg gcttgaggcc tagcgtggtg tccgccgccg 2040

cgtgccactc cggccgcact atgcgttttt tgtccttgct gccctcgatt gccttccagc 2100

agcatgggct aacaaaggga gggtgtgggg ctcactctta aggagcccat gaagcttacg 2160

ttggatagga atggaagggc aggaggggcg actggggccc gcccgccttc ggagcacatg 2220

tccgacgcca cctggatggg gcgaggcctg tggctttccg aagcaatcgg gcgtgagttt 2280

agcctacctg ggccatgtgg ccctagcact gggcacggtc tggcctggcg gtgccgcgtt 2340

cccttgcctc ccaacaaggg tgaggccgtc ccgcccggca ccagttgctt gcgcggaaag 2400

atggccgctc ccggggccct gttgcaagga gctcaaaatg gaggacgcgg cagcccggtg 2460

gagcgggcgg gtgagtcacc cacacaaagg aagagggcct tgcccctcgc cggccgctgc 2520

ttcctgtgac cccgtggtct atcggccgca tagtcacctc gggcttctct tgagcaccgc 2580

tcgtcgcggc ggggggaggg gatctaatgg cgttggagtt tgttcacatt tggtgggtgg 2640

agactagtca ggccagcctg gcgctggaag tcattcttgg aatttgcccc tttgagtttg 2700

gagcgaggct aattctcaag cctcttagcg gttcaaaggt attttctaaa cccgtttcca 2760

ggtgttgtga aagccaccgc taattcaaag caagccgcca cc 2802

<210> 740
<211> 2399
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 740
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aataggctga aagagagatt tagaatgaca ggcgagctca 720

cggggacagc ccccccccaa agcccccagg gatgtaatta cgtccctccc ccgctagggg 780

gcagcagcga gccgcccggg gctccgctcc ggtccggcgc tccccccgca tccccgagcc 840

ggcagcgtgc ggggacagcc cgggcacggg gaaggtggca cgggatcgct ttcctctgaa 900

cgcttctcgc tgctctttga gcctgcagac acctgggggg atacggggaa aaagcttgaa 960

ttcgtttatc ggccaccgag gccaagatct ggccgccaac ccgccccgac cggagctgag 1020

agtaattcat acaaaaggac tcgcccctgc cttggggaat cccagggacc gtcgttaaac 1080

tcccactaac gtagaaccca gagatcgctg cgttcccgcc ccctcacccg cccgctctcg 1140

tcatcactga ggtggagaat agcatgcgtg aggctccggt gcccgtcagt gggcagagcg 1200

cacatcgccc acagtccccg agaagttggg gggaggggtc ggcaattgaa cgggtgccta 1260

gagaaggtgg cgcggggtaa actgggaaag tgatgtcgtg tactggctcc gccttttcc 1320

cgagggtggg ggagaaccgt atataagtgc agtagtcgcc gtgaacgttc tttttcgcaa 1380

cgggtttgcc gccagaacac aggtaagtgc cgtgtgtggt tcccgcgggc ctggcctctt 1440

tacgggttat ggcccttgcg tgccttgaat tacttccacc tggctccagt acgtgattct 1500

tgatcccgag ctggagccag gggcgggcct tgcgctttag gagccccttc gcctcgtgct 1560

tgagttgagg cctggcctgg gcgctggggc cgccgcgtgc gaatctggtg gcaccttcgc 1620

gcctgtctcg ctgctttcga taagtctcta gccatttaaa atttttgatg acgtgctgcg 1680

acgctttttt tctggcaaga tagtcttgta aatgcgggcc aggatctgca cactggtatt 1740

tcggtttttg ggcccgcggc cggcgacggg gcccgtgcgt cccagcgcac atgttcggcg 1800

aggcggggcc tgcgagcgcg gccaccgaga atcggacggg ggtagtctca agctggccgg 1860

cctgctctgg tgcctggcct cgcgccgccg tgtatcgccc cgccctgggc ggcaaggctg 1920

gcccggtcgg caccagttgc gtgagcggaa agatggccgc ttcccggccc tgctccaggg 1980

ggctcaaaat ggaggacgcg gcgctcggga gagcgggcgg gtgagtcacc cacacaaagg 2040

aaaagggcct ttccgtcctc agccgtcgct tcatgtgact ccacggagta ccgggcgccg 2100

tccaggcacc tcgattagtt ctggagcttt tggagtacgt cgtctttagg ttgggggggag 2160

gggttttatg cgatggagtt tccccacact gagtgggtgg agactgaagt taggccagct 2220

tggcacttga tgtaattctc cttggaattt ggccttttg agtttggatc ttggttcatt 2280

ctcaagcctc agacagtggt tcaaagtttt tttcttccat ttcaggtgtc gtgaaaacta 2340

ccagcttgct tgttcttttt gcagaagctc agaataaacg ctcaactttg gccgccacc 2399

<210> 741
<211> 2872
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 741
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaaaatcgat aatatatggt agggttcata gccagagtaa 720

ccttttttt taatttttat tttattttat ttttgagtcg ggcgcgccaa aatgaagtga 780

agttcctata ctttctagag cgagctcacg gggacagccc ccccccaaag cccccaggga 840

tgtaattacg tccctccccc gctaggggc agcagcgagc cgcccggggc tccgctccgg 900

tccggcgctc cccccgcatc cccgagccgg cagcgtgcgg ggacagcccg ggcacgggga 960

aggtggcacg ggatcgcttt cctctgaacg cttctcgctg ctctttgagc ctgcagacac 1020

ctgggggat acggggaaaa agctttaggc tgaaagagag atttagaatg acaggcgagc 1080

tcacggggac agcccccccc caaagccccc agggatgtaa ttacgtccct cccccgctag 1140

ggggcagcag cgagccgccc ggggctccgc tccggtccgg cgctcccccc gcatccccga 1200

gccggcagcg tgcggggaca gcccgggcac ggggaaggtg gcacgggatc gctttcctct 1260

gaacgcttct cgctgctctt tgagcctgca gacacctggg gggatacggg gaaaaagctt 1320

gaaacttgat ctgtcgccgc aattcaagct tcgtgaggct ccggtgcccg tcagtgacct 1380

gctatagaca agcaggggat ggcggggctg acgtcgggag gtggcctcca cgggaaggga 1440

cacccggatc tcgacacagc cttggcagtg gagtcaggaa gggtaggaca gattctggac 1500

gccctcttgg ccagtcctca ccgccccacc cccgatggag ccgagagtaa ttcatacaaa 1560

aggagggatc gccttcgccc ctgggaatcc cagggaccgt cgctaaattc tggccggcct 1620

cccagcccgg aaccgctgtg cccgcccagc gcggcgggag gagcctgcgc ctagggcgga 1680

tcgcgggtcg gcgggagagc acaagcccac agtccccggc ggtgggggag gggcgcgctg 1740

agcgggggcc cgggagccag cgcggggcaa actgggaaag tggtgtcgtg tgctggctcc 1800

gccctcttcc cgagggtggg ggagaacggt ataaaagtgc ggtagtcgcg ttggacgttc 1860

tttttcgcaa cgggtttgcc gtcagaacgc aggtgagtgg cgggtgtggc ctccgcgggc 1920

ccgggctccc tcctttgagc ggggtcggac cgccgtgcgg gtgtcgtcgg ccgggcttct 1980

ctgcgagcgt tcccgccctg gatggcgggc tgtgcgggag ggcgaggggg ggaggcctgg 2040

cggcggcccc ggagcctcgc ctcgtgtcgg gcgtgaggcc tagcgtggct tccgccccgc 2100

cgcgtgccac cgcggccgcg ctttgctgtc tgcccggctg ccctcgattg cctgcccgcg 2160

gcccgggcca acaaagggag ggcgtggagc tggctggtag ggagccccgt agtccgcatg 2220

tcgggcaggg agagcggcag cagtcggggg ggggaccggg cccgcccgtc ccgcagcaca 2280

tgtccgacgc cgcctggacg ggtagcggcc tgtgtcctga taaggcggcc gggcggtggg 2340

ttttagatgc cgggttcagg tggccccggg tcccggcccg gtctggccag taccccgtag 2400

tggcttagct ccgaggaggg cgagcccgcc cgcccggcac cagttgcgtg cgcggaaaga 2460

tggccgctcc cgggccctgt agcaaggagc tcaaaatgga ggacgcggca gcccggcgga 2520

gcggggcggg tgagtcaccc acacaaagga agagggcctt gcccctcgcc ggccgctgct 2580

tcctgtgacc ccgtggtgta ccggccgcac ttcagtcacc ccgggcgctc tttcggagca 2640

ccgctggcct ccgctggggg aggggatctg tctaatggcg ttggagtttg ctcacatttg 2700

gtgggtggag actgtagcca ggccagcctg gccatggaag taattcttgg aatttgccca 2760

ttttgagttt ggagcgaagc tgattgacaa agctgcttag ccgttcaaag gtattcttcg 2820

aacttttttt ttaaggtgtt gtgaaaacca ccgctaattc aaatccgcca cc 2872

<210> 742
<211> 2508
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 742
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaggtaattc gtagcatcct taggatcgag tcaatgggaa 720

aaacccattg gagccaagta cactgactca atagggactt tccattgggt tttgcccagt 780

acataaggtc aatagggggt gagtcaacag gaaagtccca ttggagccaa gtacattgag 840

tcaataggga ctttccaatg ggttttgccc agtacataag gtcaatggga ggtaagccaa 900

tgggtttttc ccattactga catgtatact gagtcattag ggactttcca atgggttttg 960

cccagtacat aaggtcaata ggggtgaatc aacaggaaag tcccattgga gccaagtaca 1020

ctgagtcaat agggactttc cattgggttt tgcccagtac aaaaggtcaa taggggggtga 1080

gtcaatgggt ttttcccatt attggcacat acataaggtc aataggggtg actagtaaat 1140

caacgggacc tcttcatcct cttcctcaat ctcgctttct ctctcgcttt ttttttttc 1200

ttcttctttt ttttttttt tttcaaaagg aggggagagg gggtaaaaaa atgctgcact 1260

gtgcggcgag gccggtgagt gagcgacgcg gagccaatca gcgcccgccg ttccgaaagt 1320

tgccttttat ggctcgagtg gccgctgtgg cgtcctataa aacccggcgg cgcaacgcgc 1380

agccactgtc gagtcgcgtc cacccgcgag cacagcttct ttgcagctcc ttcgttgccg 1440

gtccacaccc gccaccaggt aagcagggac gccgggccca gcgggccttc gctctctcgt 1500

ggctagtacc tcactgcagg gtcctgagga tcactcagaa cggacaccat gggcgggtgg 1560

agggtggtgc cgggccgcgg agcggacact ggcacagcca actttacgcc tagcgtgtag 1620

actctttgca gccacattcc cgcggtgtag acactcgtgg gcccgctccc gctcggtgcg 1680

tggggcttgg ggacacacta gggtcgcggt gtgggcattt gatgagccgg tgcggcttgc 1740

gggtgttaaa agccgtatta ggtccatctt gagagtacac agtattggga accagacgct 1800

acgatcacgc ctcaatggcc tctgggtctt tgtccaaacc ggtttgccta ttcggcttgc 1860

cgggcgggcg ggcgggcggg cgggcgcggc agggccggct cggccgggtg ggggctggga 1920

tgccactgcg cgtgcgctct ctatcactgg gcatcgaggc gcgtgtgcgc tagggaggga 1980

cctcttcctc tccccctctt cctagttagc tgcgcgtgcg tattgaggct gggagcgcgg 2040

ctgcccgggg ttgggcgagg gcggggccgt tgtccggaag gggcggggtc acagtggcac 2100

gggcgccttg tttgcgcttc ctgctgggtg tggtcgcctc ccgcgcgcgc acaagccgcc 2160

cgtcggcgca gtgtaggcgg agcttgcgcc cgtttgggga gggggcggag gtctggcttc 2220

ctgccctagg tccgcctccg ggccagcgtt tgccttttat ggtaataatg cggccggtct 2280

gcgcttcctt tgtcccctga gcttgggcgc gcgccccctg gcggctcgag cccgcggctt 2340

gccggaagtg ggcagggcgg cagcggctgc tcttggcggc cccgaggtga ctatagcctt 2400

cttttgtgtc ttgatagttc gccagcctct gctaaccatg ttcatgcctt cttcttttc 2460

ctacagctcc tgggcaacgt gctggttaat tcaaagcaag ccgccacc 2508

<210> 743
<211> 2477
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 743
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaggtaattc gtagcatcct taggatcgag tcaatgggaa 720

aaacccattg gagccaagta cactgactca atagggactt tccattgggt tttgcccagt 780

acataaggtc aatagggggt gagtcaacag gaaagtccca ttggagccaa gtacattgag 840

tcaataggga ctttccaatg ggttttgccc agtacataag gtcaatggga ggtaagccaa 900

tgggtttttc ccattactga catgtatact gagtcattag ggactttcca atgggttttg 960

cccagtacat aaggtcaata ggggtgaatc aacaggaaag tcccattgga gccaagtaca 1020

ctgagtcaat agggactttc cattgggttt tgcccagtac aaaaggtcaa taggggggtga 1080

gtcaatgggt ttttcccatt attggcacat acataaggtc aatagggggtg actagtaaat 1140

caacgggaca cctcttcctc aactcacttc tctctactct cacttttttt tttcttcttc 1200

ttttttttttt ttttttttttt ttttttttttt gcaaaagaag ggggtaaaaa aatgctgcac 1260

tgtcgggcga ggccggtgag tgagcgagcc ggagccaatc agcgcccgcc gttccgaaat 1320

tgcctttttat ggctcgagtg gccgctgtgg cgtcctataa aacccggcgg cgcaacgcgc 1380

gccactgtcg agtccgcgtc cacccgcgag tacaacctcc ttgcagctcc tccgtcccgg 1440

tccacacccg ccaccaggta agcagggacg tcgggcccag cgggccccaa ctttaccttg 1500

gccactacct cgctgcagga tcgtgaggaa cactcagaag ggacaccgta gaggggtgga 1560

gcgtggtacc gggccgcgga gcagctggca aagcttaact ttcccggccc ctagggtgta 1620

gagtgtttgc agtcgtattc ccgcggtgtg gacactcgtg ggtacgctcc tgcttggtgc 1680

gcggggcttg gggacacact agagtcgcgg tgtgggcatt tggagagccg gtgcggctgc 1740

gggtgttaag ccgcatctgt ccaccttgag gggcaacagt attggggtca ggcgttacaa 1800

tcacgctttg atggcctatg ggtctttgtc caaaccggtt ttgccattcg gcttggcggg 1860

cgcggcgggg ccgctcggcc gggtgggggc tgggatgcca ttgcgcgtgc gcgctctatc 1920

actgggcatt ggggccgtgc gcgctgggga gggaactctt cctctccccc tcttccgagt 1980

taagagttgc gcgtgcgtat tgagactagg agcgcggccg ccccgggttg ggcgagggcg 2040

ggccgtccac cggaaggggc ggggtcgtag cggctaggcg cctgctcgcg cttcctgctg 2100

ggtgtggtcg cctcccgcgc gcgcactagc cgcccgtcgc ctcagtgtag gcgggcctgt 2160

gcccgtttgg ggaggggcgg aggcctggct tcctgccgtg ggtccgcctc cgggccagcg 2220

tttgcctttt atggtaataa tgcggctgtc ctgcgcttcc tttgtcccct gagcttgggc 2280

gcgcccctgg cggctcgagg ccgcggctcg ccggaagtgg gcagggcggc agcggctgct 2340

cttggcggct ccgcggtgac catagccctc ttttgtgcct tgatagttcg ccagcctctg 2400

ctaaccatgt tcatgccttc ttctttttcc tacagctcct gggcaacgtg ctggttaatt 2460

caaagcaagc cgccacc 2477

<210> 744
<211> 2466
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 744
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca tagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaggtaattc gtagcatcct taggatcgag tcaatgggaa 720

aaacccattg gagccaagta cactgactca atagggactt tccattgggt tttgcccagt 780

acataaggtc aataggggggt gagtcaacag gaaagtccca ttggagccaa gtacattgag 840

tcaataggga ctttccaatg ggttttgccc agtacataag gtcaatggga ggtaagccaa 900

tgggtttttc ccattactga catgtatact gagtcattag ggactttcca atgggttttg 960

cccagtacat aaggtcaata ggggtgaatc aacaggaaag tcccattgga gccaagtaca 1020

ctgagtcaat agggactttc cattgggttt tgcccagtac aaaaggtcaa taggggggtga 1080

gtcaatgggt ttttcccatt attggcacat acataaggtc aatagggggtg actagtaaat 1140

caacgggact ctctcttttt ttttttttttt ttttttttttt ttccaaaagg aggggagagg 1200

gggtaaaaaa atgctgcact gtgcggctag gccggtgagt gagcggcgcg gagccaatca 1260

gcgctcgccg ttccgaaagt tgccttttat ggctcgagtg gccgctgtgg cgtcctataa 1320

aacccggcgg cgcaacgcgc agccactgtc gagtccgcgt ccacccgcga gcacaggcct 1380

ttcgcagctc tttcttcgcc gctccacacc cgccaccagg taagcaggga caacaggccc 1440

agccggccac agccctcccg tgggcagtga ccgcgctgca gggtcgcggg ggacactcgg 1500

cgcggacacc ggggaaggct ggagggtggt gccgggccgc ggagcggaca ctttcagatc 1560

caactttcag tccagggtgt agacccttta cagccgcatt gccacggtgt agacaccggt 1620

ggacccgctc tggctcagag cacgcggctt gggggaaccc attagggtcg cagtgtgggc 1680

gctatgagag ccgatgcagc tttcgggtgt tgaaccgtat ctgcccacct tgggggggagg 1740

acacaaggtc gggagccaaa cgccacgatc atgccttggt ggcccatggg tctttgtcta 1800

aaccggtttg cccatttggc ttgccgggcg ggcgggcgcg gcgggcccgg ctcggccggg 1860

tgggggctgg gttgccactg cgcttgcgcg ctctatggct gggtattggg gcgcgtgcac 1920

gctggggagg gagcccttcc tcttcccccct ctcccaagtt aaacttgcgc gtgcgtattg 1980

agacttggag cgcggccacc ggggttgggc gagggcgggg ccgttgtccg gaaggggcgg 2040

ggtcgcagag gattcggggc gcctgctcgc gcttcctgct gggtgtggtc gcctcccgcg 2100

cgcgcactag accgcccggc gggggggcga aggcgggtct tgcgcccgtt tggggagggg 2160

gcggacacct ggcttcctgc cgtggggccg cctccggacc agcgtttgcc tcttatggta 2220

ataacgcggc cggcctgggc ttcatttgtc ccctgagttt gggcgcgcgc cccctggcgg 2280

cccgtgaccg cggcttgccg gaagtgggca gggcggcaac ggctgcgcct agtggcccgc 2340

cagtgaccgc gaccctcttt tgtgccctga tatagttcgc cagcctctgc taaccatgtt 2400

catgccttct tctttttcct acagctcctg ggcaacgtgc tggttaattc aaagcaagcc 2460

gccacc 2466

<210> 745
<211> 1728
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 745
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagtttac ctgactcatg gtcctttcac 120

tttcacatgg gatttcccag ttatgaaatt aataaaaatc agtgatttcc acatctgtgt 180

gtgcctgtgc caggctgggt ggggaacagg aggccgagat gattccggga actgtcagaa 240

ggaataaaaa tcaatgattt ccacatcctg tctgtcttat gtcttggggg gtggggaggc 300

caggaagatt ccaggaaggt cagagtcaat aaaaatcaat ggtttccaca tctctcagtg 360

cctctatctg gaggccaggt agggctggcc ttgggggagg gggaggccag aatgactcca 420

agagctacag gaaggggggа gggggaaaaa ggccagaata attccaggaa ccgccaagaa 480

ggaattcgtt tatcggccac cgaggccaag atctggccgc cagcacatcg cccacagtcc 540

ccgagaagtt gggaggggtc ggcaattgaa ccggtgccta gagaaggtgg cgcggggtaa 600

actgggaaag tgatgtcgtg tactggctcc gccttttтcc cgagggtggg ggagaaccgt 660

atataagtgc agtagtcgcc gtgaacgttc tttttcgcaa cgggtttgcc gccagaacac 720

aggtaagtgc cgtgtgtggt tcccgcgggc ctggcctctt tacgggttat ggcccttgcg 780

tgccttgaat tacttccacc tggctccagt acgtgattct tgatcccgag ctggagccag 840

gggcgggcct tgcgctttag gagccccttc gcctcgtgct tgagttgagg cctggcctgg 900

gcgctggggc cgccgcgtgc gaatctggtg gcaccttcgc gcctgtctcg ctgctttcga 960

taagtctcta gccatttaaa atttttgatg acgtgctgcg acgctttttt tctggcaaga 1020

tagtcttgta aatgcgggcc aggatctgca cactggtatt tcggtttttg ggcccgcggc 1080

cggcgacggg gcccgtgcgt cccagcgcac atgttcggcg aggcggggcc tgcgagcgcg 1140

gccaccgaga atcggacggg ggtagtctca agctggccgg cctgctctgg tgcctggcct 1200

cgcgccgccg tgtatcgccc cgccctgggc ggcaaggctg gcccggtcgg caccagttgc 1260

gtgagcggaa agatggccgc ttcccggccc tgctccaggg ggctcaaaat ggaggacgcg 1320

gcgctcggga gagcgggcgg gtgagtcacc cacacaaagg aaaagggcct ttccgtcctc 1380

agccgtcgct tcatgtgact ccacggagta ccgggcgccg tccaggcacc tcgattagtt 1440

ctggagcttt tggagtacgt cgtctttagg ttgggggggag gggttttatg cgatggagtt 1500

tccccacact gagtgggtgg agactgaagt taggccagct tggcacttga tgtaattctc 1560

cttggaattt ggccttttg agtttggatc ttggttcatt ctcaagcctc agacagtggt 1620

tcaaagtttt tttcttccat ttcaggtgtc gtgaacacca tctattgctt agcttccttc 1680

ttctttttcc tagaagctca gaataaacgc tcaactttgg ccgccacc 1728

<210> 746
<211> 2053
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 746
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagtttac ctgactcatg gtcctttcac 120

tttcacatgg gatttcccag ttatgaaatt aataaaaatc agtgatttcc acatctgtgt 180

gtgcctgtgc caggctgggt ggggaacagg aggccgagat gattccggga actgtcagaa 240

ggaataaaaa tcaatgattt ccacatcctg tctgtcttat gtcttggggg gtggggaggc 300

caggaagatt ccaggaaggt cagagtcaat aaaaatcaat ggtttccaca tctctcagtg 360

cctctatctg gaggccaggt agggctggcc ttgggggagg gggaggccag aatgactcca 420

agagctacag gaaggggggа gggggaaaaa ggccagaata attccaggaa ccgccaagaa 480

ggaaacttga tctgtcgccg caattcaagc ttcgtgaggc tccggtgccc gtcagtgacc 540

tgctatactc tggagacgag cggggctgac gtcgggaggt ggcctccgtg ggaagggaca 600

cccggatctt gacacagcct tggcagcgga gtaaggaaga gtagggatag attctggccg 660

ccctcttggc cagcttctcg ccgccccacc ctccgctagg gccaagagta attcatacaa 720

aaggagggat cgccttcgca aggggagagc ccagggaccg tccctaaatt ctcacagacc 780

caaatccctg tagccgcccc acgacagcgc gaggagcatg cgctcagggc tgagcgcggg 840

gagagcagag cacacaagct catagaccct ggtcgtgggg gggaggaccg gggagctggc 900

gcggggcaaa ctgggaaagc ggtgtcgtgt gctggctccg ccctcttccc gagggtgggg 960

gagaacggta tataagtgcg gcagtcgcct tggacgttct ttttcgcaac gggtttgccg 1020

tcagaacgca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg aggtcctgct 1080

ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt cccgcttcga 1140

gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta gcctcgcctc 1200

gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac tccggccgca 1260

ctctggtctt ttttttttg ttgttgttgc cctgctgcct tcgattgccg ttcagcaata 1320

ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag gtcatggttg 1380

gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga gcacatgtcc 1440

gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg ctggggttag 1500

cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc gccgcgttgc 1560

cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg cgtggaaaga 1620

tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga 1680

gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg gctgctgctt 1740

cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga gcacggctag 1800

tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg tgggtggaga 1860

ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt gagttttgag 1920

cggagctaat tctcgggctt cttagcggtt caaaggtatc ttttaaaccc ttttttaggt 1980

gttgtgaaaa ccaccagctt ccttcttctt tttcctagaa gctcagaata aacgctcaac 2040

tttggccgcc acc 2053

<210> 747
<211> 2023
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 747
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagtttac ctgactcatg gtcctttcac 120

tttcacatgg gatttcccag ttatgaaatt aataaaaatc agtgatttcc acatctgtgt 180

gtgcctgtgc caggctgggt ggggaacagg aggccgagat gattccggga actgtcagaa 240

ggaataaaaa tcaatgattt ccacatcctg tctgtcttat gtcttggggg gtggggaggc 300

caggaagatt ccaggaaggt cagagtcaat aaaaatcaat ggtttccaca tctctcagtg 360

cctctatctg gaggccaggt agggctggcc ttgggggagg gggaggccag aatgactcca 420

agagctacag gaaggggggа gggggaaaaa ggccagaata attccaggaa ccgccaagaa 480

gcctctcccg gccagaggag caaggtatgc gggaggcgac caggaggata gcggggctga 540

cgtcgggagg tggcctccgt gggaaggaca cccggatctt gacacagcct tggcagcgga 600

gtcaggaaga gtaggggtag gttctggacg ccctcttggc cagctcatcg ccgccccacc 660

ctctgctgga gcacagagta attcatacaa aaggagggat cgccttcgca aggggagagc 720

ccagggaccg tccctaaatt ctcacagacc caaatccctg tagccgcccc acgacagcgc 780

gaggagcatg cgcccagggc tgagcgcggg tagatcagag cacacaagct cacagtcccc 840

ggcggtgggg ggaggggcgc gctgagcggg ggccagggag ctggcgcggg gcaaactggg 900

aaagtggtgt cgtgtgctgg ctccgccctc ttcccgaggg tgggggagaa cggtatataa 960

gtgcggtagt cgccttggac gttctttttc gcaacgggtt tgccgtcaga acgcaggtga 1020

gtggcgggtg tggcttccgc gggccccgga gctggagccc tgctctgagc gggccgggct 1080

gatatgcgag tgtcgtccgc agggtttagc tgtgagcatt cccacttcga gtggcgggcg 1140

gtgcgggggt gagagtgcga ggcctagcgg caaccccgta gcctcgcctc gtgtccggct 1200

tgaggcctag cgtggtgtcc gccgccgcgt gccactccgg ccgcactatg cgtttttgt 1260

ccttgctgcc ctcgattgcc ttccagcagc atgggctaac aaagggaggg tgtggggctc 1320

actcttaagg agcccatgaa gcttacgttg gataggaatg gaagggcagg aggggcgact 1380

ggggcccgcc cgccttcgga gcacatgtcc gacgccacct ggatggggcg aggcctgtgg 1440

ctttccgaag caatcgggcg tgagtttagc ctacctgggc catgtggccc tagcactggg 1500

cacggtctgg cctggcggtg ccgcgttccc ttgcctccca acaagggtga ggccgtcccg 1560

cccggcacca gttgcttgcg cggaaagatg gccgctcccg gggccctgtt gcaaggagct 1620

caaaatggag gacgcggcag cccggtggag cgggcgggtg agtcacccac acaaaggaag 1680

agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtctatc ggccgcatag 1740

tcacctcggg cttctcttga gcaccgctcg tcgcggcggg gggaggggat ctaatggcgt 1800

tggagtttgt tcacatttgg tgggtggaga ctagtcaggc cagcctggcg ctggaagtca 1860

ttcttggaat ttgccccttt gagtttggag cgaggctaat tctcaagcct cttagcggtt 1920

caaaggtatt ttctaaaccc gtttccaggt gttgtgaaaa ccaccagctt ccttcttctt 1980

tttcctagaa gctcagaata aacgctcaac tttggccgcc acc 2023

<210> 748
<211> 2071
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 748
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaagtttac ctgactcatg gtcctttcac 120

tttcacatgg gatttcccag ttatgaaatt aataaaaatc agtgatttcc acatctgtgt 180

gtgcctgtgc caggctgggt ggggaacagg aggccgagat gattccggga actgtcagaa 240

ggaataaaaa tcaatgattt ccacatcctg tctgtcttat gtcttggggg gtggggaggc 300

caggaagatt ccaggaaggt cagagtcaat aaaaatcaat ggtttccaca tctctcagtg 360

cctctatctg gaggccaggt agggctggcc ttgggggagg gggaggccag aatgactcca 420

agagctacag gaaggggggа gggggaaaaa ggccagaata attccaggaa ccgccaagaa 480

ggaaacttga tctgtcgccg caattcaagc ttcgtgaggc tccggtgccc gtcagtgacc 540

tgctatagac aagcagggga tggcggggct gacgtcggga ggtggcctcc acgggaaggg 600

acacccggat ctcgacacag ccttggcagt ggagtcagga agggtaggac agattctgga 660

cgccctcttg gccagtcctc accgccccac ccccgatgga gccgagagta attcatacaa 720

aaggagggat cgccttcgcc cctgggaatc ccagggaccg tcgctaaatt ctggccggcc 780

tcccagcccg gaaccgctgt gcccgcccag cgcggcggga ggagcctgcg cctagggcgg 840

atcgcgggtc ggcgggagag cacaagccca cagtccccgg cggtgggggа ggggcgcgct 900

gagcgggggc ccgggagcca gcgcggggca aactgggaaa gtggtgtcgt gtgctggctc 960

cgccctcttc ccgagggtgg gggagaacgg tataaaagtg cggtagtcgc gttggacgtt 1020

ctttttcgca acgggtttgc cgtcagaacg caggtgagtg gcgggtgtgg cctccgcggg 1080

cccgggctcc ctcctttgag cggggtcgga ccgccgtgcg ggtgtcgtcg gccgggcttc 1140

tctgcgagcg ttcccgccct ggatggcggg ctgtgcggga gggcgagggg gggaggcctg 1200

gcggcggccc cggagcctcg cctcgtgtcg ggcgtgaggc ctagcgtggc ttccgccccg 1260

ccgcgtgcca ccgcggccgc gctttgctgt ctgcccggct gccctcgatt gcctgcccgc 1320

ggcccgggcc aacaaaggga gggcgtggag ctggctggta gggagccccg tagtccgcat 1380

gtcgggcagg gagagcggca gcagtcgggg gggggaccgg gcccgcccgt cccgcagcac 1440

atgtccgacg ccgcctggac gggtagcggc ctgtgtcctg ataaggcggc cgggcggtgg 1500

gttttagatg ccgggttcag gtggccccgg gtcccggccc ggtctggcca gtaccccgta 1560

gtggcttagc tccgaggagg gcgagcccgc ccgcccggca ccagttgcgt gcgcggaaag 1620

atggccgctc ccgggccctg tagcaaggag ctcaaaatgg aggacgcggc agcccggcgg 1680

agcggggcgg gtgagtcacc cacacaaagg aagagggcct tgcccctcgc cggccgctgc 1740

ttcctgtgac cccgtggtgt accggccgca cttcagtcac cccgggcgct ctttcggagc 1800

accgctggcc tccgctgggg gaggggatct gtctaatggc gttggagttt gctcacattt 1860

ggtgggtgga gactgtagcc aggccagcct ggccatggaa gtaattcttg gaatttgccc 1920

attttgagtt tggagcgaag ctgattgaca aagctgctta gccgttcaaa ggtattcttc 1980

gaacttttt tttaaggtgt tgtgaaaacc accagcttcc ttcttctttt tcctagaagc 2040

tcagaataaa cgctcaactt tggccgccac c 2071

<210> 749
<211> 2290
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 749
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagtttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaacc tctcccggcc agaggagcaa ggtatgcggg 780

aggcgaccag gaggatagcg gggctgacgt cgggaggtgg cctccgtggg aaggacaccc 840

ggatcttgac acagccttgg cagcggagtc aggaagagta ggggtaggtt ctggacgccc 900

tcttggccag ctcatcgccg ccccaccctc tgctggagca cagagtaatt catacaaaag 960

gagggatcgc cttcgcaagg ggagagccca gggaccgtcc ctaaattctc acagacccaa 1020

atccctgtag ccgccccacg acagcgcgag gagcatgcgc ccagggctga gcgcgggtag 1080

atcagagcac acaagctcac agtccccggc ggtgggggga ggggcgcgct gagcgggggc 1140

cagggagctg gcgcggggca aactgggaaa gtggtgtcgt gtgctggctc cgccctcttc 1200

ccgagggtgg gggagaacgg tatataagtg cggtagtcgc cttggacgtt ctttttcgca 1260

acgggtttgc cgtcagaacg caggtgagtg gcgggtgtgg cttccgcggg ccccggagct 1320

ggagccctgc tctgagcggg ccgggctgat atgcgagtgt cgtccgcagg gtttagctgt 1380

gagcattccc acttcgagtg gcgggcggtg cgggggtgag agtgcgaggc ctagcggcaa 1440

ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcc gccgcgtgcc 1500

actccggccg cactatgcgt tttttgtcct tgctgccctc gattgccttc cagcagcatg 1560

ggctaacaaa gggagggtgt ggggctcact cttaaggagc ccatgaagct tacgttggat 1620

aggaatggaa gggcaggagg ggcgactggg gcccgcccgc cttcggagca catgtccgac 1680

gccacctgga tggggcgagg cctgtggctt tccgaagcaa tcgggcgtga gtttagccta 1740

cctgggccat gtggccctag cactgggcac ggtctggcct ggcggtgccg cgttcccttg 1800

cctcccaaca agggtgaggc cgtcccgccc ggcaccagtt gcttgcgcgg aaagatggcc 1860

gctcccgggg ccctgttgca aggagctcaa aatggaggac gcggcagccc ggtggagcgg 1920

gcgggtgagt cacccacaca aaggaagagg gccttgcccc tcgccggccg ctgcttcctg 1980

tgaccccgtg gtctatcggc cgcatagtca cctcgggctt ctcttgagca ccgctcgtcg 2040

cggcgggggg aggggatcta atggcgttgg agtttgttca catttggtgg gtggagacta 2100

gtcaggccag cctggcgctg gaagtcattc ttggaatttg ccccttgag tttggagcga 2160

ggctaattct caagcctctt agcggttcaa aggtattttc taaacccgtt tccaggtgtt 2220

gtgaaaacca ccagcttcct tcttcttttt cctagaagct cagaataaac gctcaacttt 2280

ggccgccacc 2290

<210> 750
<211> 2224
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 750
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aacctctccc ggccagagga gcaaggtatg cgggaggcga 720

ccaggaggat agcggggctg acgtcgggag gtggcctccg tgggaaggac acccggatct 780

tgacacagcc ttggcagcgg agtcaggaag agtaggggta ggttctggac gccctcttgg 840

ccagctcatc gccgccccac cctctgctgg agcacagagt aattcataca aaaggaggga 900

tcgccttcgc aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct 960

gtagccgccc cacgacagcg cgaggagcat gcgcccaggg ctgagcgcgg gtagatcaga 1020

gcacacaagc tcacagtccc cggcggtggg gggaggggcg cgctgagcgg gggccaggga 1080

gctggcgcgg ggcaaactgg gaaagtggtg tcgtgtgctg gctccgccct cttcccgagg 1140

gtgggggaga acggtatata agtgcggtag tcgccttgga cgttcttttt cgcaacgggt 1200

ttgccgtcag aacgcaggtg agtggcgggt gtggcttccg cgggccccgg agctggagcc 1260

ctgctctgag cgggccgggc tgatatgcga gtgtcgtccg cagggtttag ctgtgagcat 1320

tcccacttcg agtggcgggc ggtgcggggg tgagagtgcg aggcctagcg gcaaccccgt 1380

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgccgccgcg tgccactccg 1440

gccgcactat gcgtttttg tccttgctgc cctcgattgc cttccagcag catgggctaa 1500

caaagggagg gtgtggggct cactcttaag gagcccatga agcttacgtt ggataggaat 1560

ggaagggcag gaggggcgac tggggcccgc ccgccttcgg agcacatgtc cgacgccacc 1620

tggatggggc gaggcctgtg gctttccgaa gcaatcgggc gtgagtttag cctacctggg 1680

ccatgtggcc ctagcactgg gcacggtctg gcctggcggt gccgcgttcc cttgcctccc 1740

aacaagggtg aggccgtccc gcccggcacc agttgcttgc gcggaaagat ggccgctccc 1800

ggggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt 1860

gagtcaccca cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc 1920

cgtggtctat cggccgcata gtcacctcgg gcttctcttg agcaccgctc gtcgcggcgg 1980

ggggagggga tctaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg 2040

ccagcctggc gctggaagtc attcttggaa tttgcccctt tgagtttgga gcgaggctaa 2100

ttctcaagcc tcttagcggt tcaaaggtat tttctaaacc cgtttccagg tgttgtgaaa 2160

accaccagct tccttcttct ttttcctaga agctcagaat aaacgctcaa ctttggccgc 2220

cacc 2224

<210> 751
<211> 2272
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 751
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaaacttg atctgtcgcc gcaattcaag cttcgtgagg 720

ctccggtgcc cgtcagtgac ctgctataga caagcagggg atggcggggc tgacgtcggg 780

aggtggcctc cacgggaagg gacacccgga tctcgacaca gccttggcag tggagtcagg 840

aagggtagga cagattctgg acgccctctt ggccagtcct caccgcccca cccccgatgg 900

agccgagagt aattcataca aaaggaggga tcgccttcgc ccctgggaat cccagggacc 960

gtcgctaaat tctggccggc ctcccagccc ggaaccgctg tgcccgccca gcgcggcggg 1020

aggagcctgc gcctagggcg gatcgcgggt cggcgggaga gcacaagccc acagtccccg 1080

gcggtggggg aggggcgcgc tgagcggggg cccgggagcc agcgcggggc aaactgggaa 1140

agtggtgtcg tgtgctggct ccgccctctt cccgagggtg ggggagaacg gtataaaagt 1200

gcggtagtcg cgttggacgt tctttttcgc aacgggtttg ccgtcagaac gcaggtgagt 1260

ggcgggtgtg gcctccgcgg gcccgggctc cctcctttga gcggggtcgg accgccgtgc 1320

gggtgtcgtc ggccgggctt ctctgcgagc gttcccgccc tggatggcgg gctgtgcggg 1380

agggcgaggg ggggaggcct ggcggcggcc ccggagcctc gcctcgtgtc gggcgtgagg 1440

cctagcgtgg cttccgcccc gccgcgtgcc accgcggccg cgctttgctg tctgcccggc 1500

tgccctcgat tgcctgcccg cggcccgggc caacaaaggg agggcgtgga gctggctggt 1560

agggagcccc gtagtccgca tgtcgggcag ggagagcggc agcagtcggg ggggggaccg 1620

ggcccgcccg tcccgcagca catgtccgac gccgcctgga cgggtagcgg cctgtgtcct 1680

gataaggcgg ccgggcggtg ggttttagat gccgggttca ggtggccccg ggtcccggcc 1740

cggtctggcc agtaccccgt agtggcttag ctccgaggag ggcgagcccg cccgcccggc 1800

accagttgcg tgcgcggaaa gatggccgct cccgggccct gtagcaagga gctcaaaatg 1860

gaggacgcgg cagcccggcg gagcggggcg ggtgagtcac ccacacaaag gaagagggcc 1920

ttgcccctcg ccggccgctg cttcctgtga ccccgtggtg taccggccgc acttcagtca 1980

ccccgggcgc tctttcggag caccgctggc ctccgctggg ggaggggatc tgtctaatgg 2040

cgttggagtt tgctcacatt tggtgggtgg agactgtagc caggccagcc tggccatgga 2100

agtaattctt ggaatttgcc cattttgagt ttggagcgaa gctgattgac aaagctgctt 2160

agccgttcaa aggtattctt cgaacttttt ttttaaggtg ttgtgaaaac caccagcttc 2220

cttcttcttt ttcctagaag ctcagaataa acgctcaact ttggccgcca cc 2272

<210> 752
<211> 2338
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 752
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaaga aacttgatct gtcgccgcaa ttcaagcttc 780

gtgaggctcc ggtgcccgtc agtgacctgc tatagacaag caggggatgg cggggctgac 840

gtcgggaggt ggcctccacg ggaagggaca cccggatctc gacacagcct tggcagtgga 900

gtcaggaagg gtaggacaga ttctggacgc cctcttggcc agtcctcacc gccccacccc 960

cgatggagcc gagagtaatt catacaaaag gagggatcgc cttcgcccct gggaatccca 1020

gggaccgtcg ctaaattctg gccggcctcc cagcccggaa ccgctgtgcc cgcccagcgc 1080

ggcgggagga gcctgcgcct agggcggatc gcgggtcggc gggagagcac aagcccacag 1140

tccccggcgg tgggggaggg gcgcgctgag cgggggcccg ggagccagcg cggggcaaac 1200

tgggaaagtg gtgtcgtgtg ctggctccgc cctcttcccg agggtggggg agaacggtat 1260

aaaagtgcgg tagtcgcgtt ggacgttctt tttcgcaacg ggtttgccgt cagaacgcag 1320

gtgagtggcg ggtgtggcct ccgcgggccc gggctccctc ctttgagcgg ggtcggaccg 1380

ccgtgcgggt gtcgtcggcc gggcttctct gcgagcgttc ccgccctgga tggcgggctg 1440

tgcgggaggg cgaggggggg aggcctggcg gcggccccgg agcctcgcct cgtgtcgggc 1500

gtgaggccta gcgtggcttc cgccccgccg cgtgccaccg cggccgcgct ttgctgtctg 1560

cccggctgcc ctcgattgcc tgcccgcggc ccgggccaac aaagggaggg cgtggagctg 1620

gctggtaggg agccccgtag tccgcatgtc gggcagggag agcggcagca gtcgggggggg 1680

ggaccgggcc cgcccgtccc gcagcacatg tccgacgccg cctggacggg tagcggcctg 1740

tgtcctgata aggcggccgg gcggtgggtt ttagatgccg ggttcaggtg gccccgggtc 1800

ccggcccggt ctggccagta ccccgtagtg gcttagctcc gaggagggcg agcccgcccg 1860

cccggcacca gttgcgtgcg cggaaagatg gccgctcccg ggccctgtag caaggagctc 1920

aaaatggagg acgcggcagc ccggcggagc ggggcgggtg agtcacccac acaaaggaag 1980

agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtgtacc ggccgcactt 2040

cagtcacccc gggcgctctt tcggagcacc gctggcctcc gctgggggag gggatctgtc 2100

taatggcgtt ggagtttgct cacatttggt gggtggagac tgtagccagg ccagcctggc 2160

catggaagta attcttggaa tttgcccatt ttgagtttgg agcgaagctg attgacaaag 2220

ctgcttagcc gttcaaaggt attcttcgaa ctttttttt aaggtgttgt gaaaaccacc 2280

agcttccttc ttctttttcc tagaagctca gaataaacgc tcaactttgg ccgccacc 2338

<210> 753
<211> 1995
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 753
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagtttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaaga attcgtttat cggccaccga ggccaagatc 780

tggccgccag cacatcgccc acagtccccg agaagttggg aggggtcggc aattgaaccg 840

gtgcctagag aaggtggcgc ggggtaaact gggaaagtga tgtcgtgtac tggctccgcc 900

tttttcccga gggtggggga gaaccgtata taagtgcagt agtcgccgtg aacgttcttt 960

ttcgcaacgg gtttgccgcc agaacacagg taagtgccgt gtgtggttcc cgcgggcctg 1020

gcctctttac gggttatggc ccttgcgtgc cttgaattac ttccacctgg ctccagtacg 1080

tgattcttga tcccgagctg gagccagggg cgggccttgc gctttaggag ccccttcgcc 1140

tcgtgcttga gttgaggcct ggcctgggcg ctggggccgc cgcgtgcgaa tctggtggca 1200

ccttcgcgcc tgtctcgctg ctttcgataa gtctctagcc atttaaaatt tttgatgacg 1260

tgctgcgacg ctttttttct ggcaagatag tcttgtaaat gcgggccagg atctgcacac 1320

tggtatttcg gtttttgggc ccgcggccgg cgacggggcc cgtgcgtccc agcgcacatg 1380

ttcggcgagg cggggcctgc gagcgcggcc accgagaatc ggacgggggt agtctcaagc 1440

tggccggcct gctctggtgc ctggcctcgc gccgccgtgt atcgccccgc cctgggcggc 1500

aaggctggcc cggtcggcac cagttgcgtg agcggaaaga tggccgcttc ccggccctgc 1560

tccagggggc tcaaaatgga ggacgcggcg ctcgggagag cgggcgggtg agtcacccac 1620

acaaaggaaa agggcctttc cgtcctcagc cgtcgcttca tgtgactcca cggagtaccg 1680

ggcgccgtcc aggcacctcg attagttctg gagcttttgg agtacgtcgt ctttaggttg 1740

gggggagggg ttttatgcga tggagtttcc ccacactgag tgggtggaga ctgaagttag 1800

gccagcttgg cacttgatgt aattctcctt ggaatttggc ctttttgagt ttggatcttg 1860

gttcattctc aagcctcaga cagtggttca aagtttttt cttccatttc aggtgtcgtg 1920

aacaccatct attgcttagc ttccttcttc tttttcctag aagctcagaa taaacgctca 1980

actttggccg ccacc 1995

<210> 754
<211> 1815
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 754
taatcgagta cgatagccgg ctaatcagcc ataccacatt tgtagaggtt ttacttgctt 60

taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca attgttgttg 120

ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc acaaatttca 180

caaataaagc atttttttca ctgcattcta gttgtggttt gtccaaactc atcaatgtat 240

cttatcatgt ctggaattcg gacggtgact gcagtgaata ataaaatgtg tgtttgtccg 300

aaatacgcgt tttgagattt ctgtcgccga ctaaattcat gtcgcgcgat agtggtgttt 360

atcgccgata gagatggcga tattggaaaa atcgatattt gaaaatatgg catattgaaa 420

atgtcgccga tgtgagtttc tgtgtaactg atatcgccat ttttccaaaa gtgatttttg 480

ggcatacgcg atatctggcg atagcgctta tatcgtttac gggggatggc gatagacgac 540

tttggtgact tgggcgattc tgtgtgtcgc aaatatcgca gtttcgatat aggtgacaga 600

cgatatgagg ctatatcgcc gatagaggcg acatcaagct ggcacatggc caatgcatat 660

cgatctatac attgaatcaa tattggccat tagccatatt attcattggt tatatagcat 720

aaatcaatat tggctattgg ccattgcata cgttgtatcc atatcataat atgtacattt 780

atattggctc atgtccaaca ttaccgccat gttgacattg attattgact agttattaat 840

agtaatcaat tacggggtca ttagttcata gcccatatat ggagttccgc gttacataac 900

ttacggtaaa tggcccgcct ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa 960

tgacgtatgt tcccatagta acgccaatag ggactttcca ttgacgtcaa tgggtggagt 1020

atttacggta aactgcccac ttggcagtac atcaagtgta tcatatgcca agtacgcccc 1080

ctattgacgt caatgacggt aaatggcccg cctggcatta tgcccagtac atgaccttat 1140

gggactttcc tacttggcag tacatctacg tattagtcat cgctattacc atggtgatgc 1200

ggttttggca gtacatcaat gggcgtggat agcggtttga ctcacgggga tttccaagtc 1260

tccaccccat tgacgtcaat gggagtttgt tttggcacca aaatcaacgg gactttccaa 1320

aatgtcgtaa caactccgcc ccattgacgc aaatgggcgg taggcgtgta cggtgggagg 1380

tctatataag cagagctcgt ttagtgaacc gtcagatcgc ctggagactc catccacgct 1440

gttttgacct ccatagaaga taccgggacc gatccagcct ccgcggccgg gaacggtgca 1500

ttggaacgcg gattccccgt gccaagagtg accctggcag aactcggtaa gtctgttgac 1560

atgtatgtga tgtatactaa cctgcatggg acgtggattt acttgtgtat gtcagataga 1620

gtaaagatta actcttgcat gtgagcgggg catcgagata gcgataaatg agtcaggagg 1680

acggagcctc tgctaaccat gttcatgcct tcttcttttt cctacagctc ctgggcaacg 1740

tgctggttat tgtgctgtct catcattttg gcaaagaatt tcaccgtcct tgacacgaag 1800

tttgctgccg ccacc 1815

<210> 755
<211> 1873
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 755
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca tagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaattcgt ttatcggcca ccgaggccaa gatctggccg 720

ccaaagtttc cagagctttc gaggaaggtt tcttcaactc aaattcatcc gcctgataat 780

tttcttatat tttcctaaag aaggaagaga agcgcataga ggagaaggga aataattttt 840

taggagcctt tcttacggct atgaggaatt tggggctcag ttgaaaagcc taaactgcct 900

ctcgggaggt tgggcgcggc gaactacttt cagcggcgca cgcagacggc gtctacgtga 960

ggggtgataa gtgacgcaac actcgttgca taaatttgcg ctccgccagc ccggagcatt 1020

taggggcggt tggctttgtt gggtgagctt gtttgtgtcc ctgtgggtgg acgtggttgg 1080

tgattggcag gatcctggta tccgctacag gtactggccc acagccgtaa agagctgcgg 1140

gggcgtgaga ggggggaatg ggtgaggtca agctggaggc ttcttggggt tgggtgggcc 1200

gctgagggga ggggagggcg aggtgacgcg acacccggcc tttctgggag agtgggcctt 1260

gttgacctaa ggggggcgag ggcagttggc acgcgcacgc gccgacagaa actaacagac 1320

attaaccaac agcgattccg tcgcgtttac ttgggaggaa ggcggaaaag aggtagtttg 1380

tgtggcttct ggaaacccta aatttggaat cccagtatga gaatggtgtc ccttcttgtg 1440

tttcaatggg atttttactt cgcgagtctt gtgggtttgg ttttgttttc agtttgccta 1500

acaccgtgct taggtttgag gcagattgga gttcggtcgg gggagtttga atatccggaa 1560

cagttagtgg ggaaagctgt ggacgcttgg taagagagcg ctctggattt tccgctgttg 1620

acgttgaaac cttgaatgac gaatttcgta ttaagtgact tagccttgta aaattgaggg 1680

gaggcttgcg gaatattaac gtatttaagg cattttgaag gaatagttgc taattttgaa 1740

gaatattagg tgtaaaagca agaaatacaa tgatcctgag gtgacacgct tatgttttac 1800

ttttaaacta ggtcaagctt ccttcttctt tttcctagaa gctcagaata aacgctcaac 1860

tttggccgcc acc 1873

<210> 756
<211> 2244
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 756
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaaga acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag attttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatcata ttacccctaa cacctgccac cccagtctta 420

atcagtggtg gaagaactct cagaactgtt tgtctcaatt ggccatttaa gtttaatagt 480

gaaagactgg ttaatgataa caatgcatcg gaaaaccttc aggaggaaag gagaatgttt 540

tgtggaacat ttttgtgtgt gtggcagttt taagttatta gttttcaaaa tcagtacttt 600

ttaatggaaa caacttgacc aaaaatctgt cacagaattt tgaacccatt aaaagaaact 660

tgatctgtcg ccgcaattca agcttcgtga ggctccggtg cccgtcagtg acctgctata 720

gacaagcagg ggatggcggg gctgacgtcg ggaggtggcc tccacgggaa gggacacccg 780

gatctcgaca cagccttggc agtggagtca ggaagggtag gacagattct ggacgccctc 840

ttggccagtc ctcaccgccc cacccccgat ggagccgaga gtaattcata caaaaggagg 900

gatcgccttc gcccctggga atcccaggga ccgtcgctaa attctggccg gcctcccagc 960

ccggaaccgc tgtgcccgcc cagcgcggcg ggaggagcct gcgcctaggg cggatcgcgg 1020

gtcggcggga gagcacaagc ccacagtccc cggcggtggg ggaggggcgc gctgagcggg 1080

ggcccgggag ccagcgcggg gcaaactggg aaagtggtgt cgtgtgctgg ctccgccctc 1140

ttcccgaggg tgggggagaa cggtataaaa gtgcggtagt cgcgttggac gttctttttc 1200

gcaacgggtt tgccgtcaga acgcaggtga gtggcgggtg tggcctccgc gggcccgggc 1260

tccctccttt gagcggggtc ggaccgccgt gcgggtgtcg tcggccgggc ttctctgcga 1320

gcgttcccgc cctggatggc gggctgtgcg ggagggcgag ggggggaggc ctggcggcgg 1380

ccccggagcc tcgcctcgtg tcgggcgtga ggcctagcgt ggcttccgcc ccgccgcgtg 1440

ccaccgcggc cgcgctttgc tgtctgcccg gctgccctcg attgcctgcc cgcggcccgg 1500

gccaacaaag ggagggcgtg gagctggctg gtagggagcc ccgtagtccg catgtcgggc 1560

agggagagcg gcagcagtcg gggggggggac cgggcccgcc cgtcccgcag cacatgtccg 1620

acgccgcctg gacgggtagc ggcctgtgtc ctgataaggc ggccgggcgg tgggttttag 1680

atgccgggtt caggtggccc cgggtcccgg cccggtctgg ccagtacccc gtagtggctt 1740

agctccgagg agggcgagcc cgcccgcccg gcaccagttg cgtgcgcgga aagatggccg 1800

ctcccgggcc ctgtagcaag gagctcaaaa tggaggacgc ggcagcccgg cggagcgggg 1860

cgggtgagtc acccacacaa aggaagaggg ccttgcccct cgccggccgc tgcttcctgt 1920

gaccccgtgg tgtaccggcc gcacttcagt caccccgggc gctctttcgg agcaccgctg 1980

gcctccgctg ggggagggga tctgtctaat ggcgttggag tttgctcaca tttggtgggt 2040

ggagactgta gccaggccag cctggccatg gaagtaattc ttggaatttg cccattttga 2100

gtttggagcg aagctgattg acaaagctgc ttagccgttc aaaggtattc ttcgaacttt 2160

ttttttaagg tgttgtgaaa accaccagct tccttcttct ttttcctaga agctcagaat 2220

aaacgctcaa ctttggccgc cacc 2244

<210> 757
<211> 2049
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 757
ttgccagcca tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg aaggtgccac 60

tcccactgtc ctttcctaat aaaatgagga aattgcatcg cattgtctga gtaggtgtca 120

ttctattctg gggggtgggg tggggcagga cagcaagggg gaggattggg aatacaatag 180

caggcatgct ggggatgcgg tgggctctat gggtacccag gtgctgaaga attgacccgg 240

ttcctcctgg gatattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 300

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 360

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 420

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttaa 480

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 540

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaaag cggggctgac 600

gtcgggaggt ggcctccgtg ggaagggaca cccggatctt gacacagcct tggcagcgga 660

gtaaggaaga gtagggatag attctggccg ccctcttggc cagcttctcg ccgccccacc 720

ctccgctagg gccaagagta attcatacaa aaggagggat cgccttcgca aggggagagc 780

ccagggaccg tccctaaatt ctcacagacc caaatccctg tagccgcccc acgacagcgc 840

gaggagcatg cgctcagggc tgagcgcggg gagagcagag cacacaagct catagaccct 900

ggtcgtgggg gggaggaccg gggagctggc gcggggcaaa ctgggaaagc ggtgtcgtgt 960

gctggctccg ccctcttccc gagggtgggg gagaacggta tataagtgcg gcagtcgcct 1020

tggacgttct ttttcgcaac gggtttgccg tcagaacgca ggtgaggggc gggtgtggct 1080

tccgcgggcc gccgagctgg aggtcctgct ccgagcgggc cgggccccgc tgtcgtcggc 1140

ggggattagc tgcgagcatt cccgcttcga gttgcgggcg gcgcgggagg cagagtgcga 1200

ggcctagcgg caaccccgta gcctcgcctc gtgtccggct tgaggcctag cgtggtgtcc 1260

gcgccgccgc cgcgtgctac tccggccgca ctctggtctt ttttttttg ttgttgttgc 1320

cctgctgcct tcgattgccg ttcagcaata ggggctaaca aagggagggt gcggggcttg 1380

ctcgcccgga gcccggagag gtcatggttg gggaggaatg gagggacagg agtggcggct 1440

ggggcccgcc cgccttcgga gcacatgtcc gacgccacct ggatggggcg aggcctgggg 1500

tttttcccga agcaaccagg ctggggttag cgtgccgagg ccatgtggcc ccagcacccg 1560

gcacgatctg gcttggcggc gccgcgttgc cctgcctccc taactagggt gaggccatcc 1620

cgtccggcac cagttgcgtg cgtggaaaga tggccgctcc cgggccctgt tgcaaggagc 1680

tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa 1740

gagggcctgg tccctcaccg gctgctgctt cctgtgaccc cgtggtccta tcggccgcaa 1800

tagtcacctc gggcttttga gcacggctag tcgcggcggg gggaggggat gtaatggcgt 1860

tggagtttgt tcacatttgg tgggtggaga ctagtcaggc cagcctggcg ctggaagtca 1920

tttttggaat ttgtcccctt gagttttgag cggagctaat tctcgggctt cttagcggtt 1980

caaaggtatc ttttaaaccc ttttttaggt gttgtgaaaa ccaccgctaa ttcaaagcaa 2040

gccgccacc 2049

<210> 758
<211> 1215
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 758
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaacg gtccgaattt caaagtcttt ttcctattga 780

cctacaaggt tttcaagaat catgttgtaa gcaactgtgt tctgaggaat ctatgtttaa 840

aaacccatcc gtggatcttg gcccagggtc cagagactga gctagccacg ccccggccgc 900

gccgcagcca ctcccacggc agttcaagtg ttaagtccca aagaccgcgc tctgtgcatg 960

cgcagacccg tccacagctg gctcctagcc aacccggccg gacgagcacc cggcgccgtc 1020

acgtgacgca cccaaccggc gtcgacctat aaaaggccgg gcgttgacgt cagcgttctc 1080

ttccgccgca gccgccgcca tcgtcggcgc gcttccctgt tcacctctga ctctgagaat 1140

ccgtcgccat ccgccagagc ttccttcttc tttttcctag aagctcagaa taaacgctca 1200

actttggccg ccacc 1215

<210> 759
<211> 1155
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 759
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaggatccaa cttctaagtc cgtttttttat tgatctaaaa 720

ggcctttttgc gaatcatctt gaaggcaatc gcgttctgag ccacctcagc tttggcacac 780

agcgcgggga ctgtcgcgag gggtttaggg cccaagcagg acacaccccg aaatctccgc 840

agccaccccc accccacgcc cccggctctt gagggttaaa tcgcaggcgc tggttctcgc 900

acgcgcacat catcccgcag gcgagcccca gcacccagcc cagggtgcgc gcgcgccgtc 960

acgtgacacg cccaaccggc gtcgccgtat aaaagcgcgg gcgttgacgt cagcgttctc 1020

ttccgccgca gccgccgcca tcgtcggcgc ccctcgcact tctcctgtgc ccgtgagaat 1080

ccgtcgccat ccgccagagc ttccttcttc tttttcctag aagctcagaa taaacgctca 1140

actttggccg ccacc 1155

<210> 760
<211> 2707
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 760
aatcaacctc tggattacaa aatttgtgaa agattgactg gtattcttaa ctatgttgct 60

ccttttacgc tatgtggata cgctgcttta atgcctttgt atcatgctat tgcttcccgt 120

atggctttca ttttctcctc cttgtataaa tcctggttgc tgtctcttta tgaggagttg 180

tggcccgttg tcaggcaacg tggcgtggtg tgcactgtgt ttgctgacgc aacccccact 240

ggttggggca ttgccaccac ctgtcagctc ctttccggga ctttcgcttt ccccctccct 300

attgccacgg cggaactcat cgccgcctgc cttgcccgct gctggacagg ggctcggctg 360

ttgggcactg acaattccgt ggtgttgtcg gggaaatcat cgtcctttcc ttggctgctc 420

gcctgtgttg ccacctggat tctgcgcggg acgtccttct gctacgtccc ttcggccctc 480

aatccagcgg accttccttc ccgcggcctg ctgccggctc tgcggcctct tccgcctctt 540

cgccttcgcc ctcagacgag tcggatctcc ctttgggccg cctccccgcg ggggaggcta 600

actgaaacac ggaaggagac aataccggaa ggaacccgcg ctatgacggc aataaaaaga 660

cagaataaaa cgcacgggtg ttgggtcgtt tgttcataaa cgcggggttc ggtcccaggg 720

ctggcactct gtcgataccc caccgagtcc ccattggggc caatacgccc gcgtttcttc 780

cttttcccca ccccaccccc caagttcggg tgaaggccca gggctcgcag ccaacgtcgg 840

ggcggcaggc cctgccatag aaatcgataa tatatggtag ggttcatagc cagagtaacc 900

ttttttttta atttttattt tattttattt ttgagtcggg cgcgccaaaa tgaagtgaag 960

ttcctatact ttctagagcg agctcacggg gacagccccc ccccaaagcc cccagggatg 1020

taattacgtc cctcccccgc taggggggcag cagcgagccg cccggggctc cgctccggtc 1080

cggcgctccc cccgcatccc cgagccggca gcgtgcgggg acagcccggg cacggggaag 1140

gtggcacggg atcgctttcc tctgaacgct tctcgctgct ctttgagcct gcagacacct 1200

ggggggatac ggggaaaaag ctttaggctg aaagagagat ttagaatgac agagcggggc 1260

tgacgtcggg aggtggcctc cgtgggaagg gacacccgga tcttgacaca gccttggcag 1320

cggagtaagg aagagtaggg atagattctg gccgccctct tggccagctt ctcgccgccc 1380

caccctccgc tagggccaag agtaattcat acaaaaggag ggatcgcctt cgcaagggga 1440

gagcccaggg accgtcccta aattctcaca gacccaaatc cctgtagccg ccccacgaca 1500

gcgcgaggag catgcgctca gggctgagcg cggggagagc agagcacaca agctcataga 1560

ccctggtcgt gggggggagg accggggagc tggcgcgggg caaactggga aagcggtgtc 1620

gtgtgctggc tccgccctct tcccgagggt gggggagaac ggtatataag tgcggcagtc 1680

gccttggacg ttctttttcg caacgggttt gccgtcagaa cgcaggtgag gggcgggtgt 1740

ggcttccgcg ggccgccgag ctggaggtcc tgctccgagc gggccgggcc ccgctgtcgt 1800

cggcggggat tagctgcgag cattcccgct tcgagttgcg ggcggcgcgg gaggcagagt 1860

gcgaggccta gcggcaaccc cgtagcctcg cctcgtgtcc ggcttgaggc ctagcgtggt 1920

gtccgcgccg ccgccgcgtg ctactccggc cgcactctgg tctttttttt ttttgttgtt 1980

gttgccctgc tgccttcgat tgccgttcag caataggggc taacaaaggg agggtgcggg 2040

gcttgctcgc ccggagcccg gagaggtcat ggttggggag gaatggaggg acaggagtgg 2100

cggctggggc ccgcccgcct tcggagcaca tgtccgacgc cacctggatg gggcgaggcc 2160

tggggttttt cccgaagcaa ccaggctggg gttagcgtgc cgaggccatg tggccccagc 2220

acccggcacg atctggcttg gcggcgccgc gttgccctgc ctccctaact agggtgaggc 2280

catcccgtcc ggcaccagtt gcgtgcgtgg aaagatggcc gctcccgggc cctgttgcaa 2340

ggagctcaaa atggaggacg cggcagcccg gtggagcggg cgggtgagtc acccacacaa 2400

aggaagaggg cctggtccct caccggctgc tgcttcctgt gaccccgtgg tcctatcggc 2460

cgcaatagtc acctcgggct tttgagcacg gctagtcgcg gcgggggggag gggatgtaat 2520

ggcgttggag tttgttcaca tttggtgggt ggagactagt caggccagcc tggcgctgga 2580

agtcattttt ggaatttgtc cccttgagtt ttgagcggag ctaattctcg ggcttcttag 2640

cggttcaaag gtatctttta aacccttttt taggtgttgt gaaaaccacc gctaattcaa 2700

agcaacc 2707

<210> 761
<211> 1290
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 761
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaatgacgtc gaggagaagt tccccaactt tcccgcctct 720

cagcctttga aagaaagaaa ggggaggggg caggccgcgt gcagccgcga gcggtgctgg 780

gctccggctc caattcccca tctcagtcgt tcccaaagtc ctcctgtttc atccaagcgt 840

gtaagggtcc ccgtccttga ctccctagtg tcctgctgcc cacagtccag tcctgggaac 900

cagcaccgat cacctcccat cgggccaatc tcagtccctt ccccctacg tcggggccca 960

cacgctcggt gcgtgcccag ttgaaccagg cggctgcgga aaaaaaaaag cggggagaaa 1020

gtagggcccg gctactagcg gttttacggg cgcacgtagc tcaggcctca agaccttggg 1080

ctgggactgg ctgagcctgg cgggaggcgg ggtccgagtc accgcctgcc gccgcgcccc 1140

cggtttctat aaattgagcc cgcagcctcc cgcttcgctc tctgctcctc ctgttcgaca 1200

gtcagccgca tcttcttttg cgtcgccagg gggagcttgc ttgttctttt tgcagaagct 1260

cagaataaac gctcaacttt ggccgccacc 1290

<210> 762
<211> 1382
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 762
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aacgaagaac aacgagaaga tcctcaactt ctcctaagcc 720

ttttcactaa tagggagaag ttcgatgggg cagccttggg cagacccaca cttctgctcc 780

atttccctgg ttcctgcagc tctcagattc tcccatttta ttcgggaagc agctttctgg 840

tttctgggtc ctggatgtcc ttggtgcaca ctccaaggac tcctcgtcct taatccatag 900

tctgtattcc ctgagtccta tcctgggaac cctcatccgg tcacttcctc ggcgggacaa 960

tctcagctcc cctccccctc tcaggtcgga gcccacacgc ttggtgcgtg cacatttcaa 1020

aaacgaggcg ggtccaaaaa gagggagggg gggaatgaga gaggcccagc tactcgcggc 1080

tttacgggtg cacgtagctc aggcctctgc gcccttgagc tgggactgga tgagccgagc 1140

gggaggcggg gcgcgcgtca tcagctcccc ccaccatcca gttcctataa atacggactg 1200

cagccctccc tggtgctctc tgctcctccc tgttctagag acagccgcat cttcttgtgc 1260

agtgccaggc tctctgctcc tcctgttcga cagtcagccg catcttcttt tgcgtcgcca 1320

gggggagctt gcttgttctt tttgcagaag ctcagaataa acgctcaact ttggccgcca 1380

cc 1382

<210> 763
<211> 1151
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 763
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca tagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagggtccga atttcaaagt ccttttttatt gacttacaag 720

gttttcaagg aaaatcttgg aagtaactgt gttccgaaga atctacgttt aaaaaccgac 780

ccctggatct ttgccttggg tccaaggacc gagctggcca cgccccagcc gcgccgcagc 840

cactcccaag gcagttcaag tgttaagccc gaaaggtaga gctctgcgca tgtgcacacc 900

cgtccatagc tgggtcccag ccaaccaggc cggaggagca cccgcgccgt cacgtgacgt 960

gcccaaccgg cgtcgaccta taaaaggccg ggcgttgacg tcagcggact cttccgccgc 1020

agccgccgcc atcgtcggcg cgcttccctg ttcacctctg tatttgagaa tccgacgcca 1080

tctgccacca ggggagcttg cttgttcttt ttgcagaagc tcagaataaa cgctcaactt 1140

tggccgccac c 1151

<210> 764
<211> 1151
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 764
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aacggtccga atttcaaagt ctttttccta ttgacctaca 720

aggttttcaa gaatcatgtt gtaagcaact gtgttctgag gaatctatgt ttaaaaaccc 780

atccgtggat cttggcccag ggtccagaga ctgagctagc cacgccccgg ccgcgccgca 840

gccactccca cggcagttca agtgttaagt cccaaagacc gcgctctgtg catgcgcaga 900

cccgtccaca gctggctcct agccaacccg gccggacgag cacccggcgc cgtcacgtga 960

cgcacccaac cggcgtcgac ctataaaagg ccgggcgttg acgtcagcgt tctcttccgc 1020

cgcagccgcc gccatcgtcg gcgcgcttcc ctgttcacct ctgactctga gaatccgtcg 1080

ccatccgcca ggggagcttg cttgttcttt ttgcagaagc tcagaataaa cgctcaactt 1140

tggccgccac c 1151

<210> 765
<211> 1991
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 765
gatccttttc cctctgacca gaattatggg aacatcatga agcccttga gcatctagct 60

tctggctaat aaaggaaatt tattttcatt gcaatagtgt gttggaattt tttgtgtctc 120

tcactcggaa ggacatatgg gagggcaaat catttaaaac atcagaatga gtatttggtt 180

tagagtttgg caacatatgc ccatatgctg gctgccatga acaaaggttg gctataaaga 240

ggtcatcagt atatgaaaca gccccctgct gtccattcct tattccatag aaaagccttg 300

acttgaggtt agatttttt tatattttgt tttgtgttat ttttttcttt aacatcccta 360

aaattttcct tacatgtttt actagccaga tttttcctcc tctcctgact actcccagtc 420

atagctgtcc ctcttctctt atggagatcc ctctcccggc cagaggagca aggtatgcgg 480

gaggcgacca ggaggatagc ggggctgacg tcgggaggtg gcctccgtgg gaaggacacc 540

cggatcttga cacagccttg gcagcggagt caggaagagt aggggtaggt tctggacgcc 600

ctcttggcca gctcatcgcc gccccaccct ctgctggagc acagagtaat tcatacaaaa 660

ggagggatcg ccttcgcaag gggagagccc agggaccgtc cctaaattct cacagaccca 720

aatccctgta gccgccccac gacagcgcga ggagcatgcg cccagggctg agcgcgggta 780

gatcagagca cacaagctca cagtccccgg cggtgggggg aggggcgcgc tgagcggggg 840

ccagggagct ggcgcggggc aaactgggaa agtggtgtcg tgtgctggct ccgccctctt 900

cccgagggtg ggggagaacg gtatataagt gcggtagtcg ccttggacgt tctttttcgc 960

aacgggtttg ccgtcagaac gcaggtgagt ggcgggtgtg gcttccgcgg gccccggagc 1020

tggagccctg ctctgagcgg gccgggctga tatgcgagtg tcgtccgcag ggtttagctg 1080

tgagcattcc cacttcgagt ggcgggcggt gcgggggtga gagtgcgagg cctagcggca 1140

accccgtagc ctcgcctcgt gtccggcttg aggcctagcg tggtgtccgc cgccgcgtgc 1200

cactccggcc gcactatgcg ttttttgtcc ttgctgccct cgattgcctt ccagcagcat 1260

gggctaacaa agggagggtg tggggctcac tcttaaggag cccatgaagc ttacgttgga 1320

taggaatgga agggcaggag gggcgactgg ggcccgcccg ccttcggagc acatgtccga 1380

cgccacctgg atggggcgag gcctgtggct ttccgaagca atcgggcgtg agtttagcct 1440

acctgggcca tgtggcccta gcactgggca cggtctggcc tggcggtgcc gcgttccctt 1500

gcctcccaac aagggtgagg ccgtcccgcc cggcaccagt tgcttgcgcg gaaagatggc 1560

cgctcccggg gccctgttgc aaggagctca aaatggagga cgcggcagcc cggtggagcg 1620

ggcgggtgag tcacccacac aaaggaagag ggccttgccc ctcgccggcc gctgcttcct 1680

gtgaccccgt ggtctatcgg ccgcatagtc acctcgggct tctcttgagc accgctcgtc 1740

gcggcggggg gaggggatct aatggcgttg gagtttgttc acatttggtg ggtggagact 1800

agtcaggcca gcctggcgct ggaagtcatt cttggaattt gccccctttga gtttggagcg 1860

aggctaattc tcaagcctct tagcggttca aaggtatttt ctaaacccgt ttccaggtgt 1920

tgtgaaaacc accagcttcc ttcttctttt tcctagaagc tcagaataaa cgctcaactt 1980

tggccgccac c 1991

<210> 766
<211> 2005
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 766
gatccttttc cctctgacca gaattatggg aacatcatga agcccttga gcatctagct 60

tctggctaat aaaggaaatt tattttcatt gcaatagtgt gttggaattt tttgtgtctc 120

tcactcggaa ggacatatgg gagggcaaat catttaaaac atcagaatga gtatttggtt 180

tagagtttgg caacatatgc ccatatgctg gctgccatga acaaaggttg gctataaaga 240

ggtcatcagt atatgaaaca gccccctgct gtccattcct tattccatag aaaagccttg 300

acttgaggtt agatttttt tatattttgt tttgtgttat ttttttcttt aacatcccta 360

aaattttcct tacatgtttt actagccaga tttttcctcc tctcctgact actcccagtc 420

atagctgtcc ctcttctctt atggagatcg ttaaatgaga aacctgtgtg ttcctttggg 480

gcggggctga cgtcgggagg tggcctccac gggaagggac acccggatct cgacacagcc 540

ttggcagtgg agtcaggaag ggtaggacag attctggacg ccctcttggc cagtcctcac 600

cgccccaccc ccgatggagc cgagagtaat tcatacaaaa ggagggatcg ccttcgcccc 660

tgggaatccc agggaccgtc gctaaattct ggccggcctc ccagcccgga accgctgtgc 720

ccgcccagcg cggcgggagg agcctgcgcc tagggcggat cgcgggtcgg cgggagagca 780

caagcccaca gtccccggcg gtgggggagg ggcgcgctga gcgggggccc gggagccagc 840

gcggggcaaa ctgggaaagt ggtgtcgtgt gctggctccg ccctcttccc gagggtgggg 900

gagaacggta taaaagtgcg gtagtcgcgt tggacgttct ttttcgcaac gggtttgccg 960

tcagaacgca ggtgagtggc gggtgtggcc tccgcgggcc cgggctccct cctttgagcg 1020

gggtcggacc gccgtgcggg tgtcgtcggc cgggcttctc tgcgagcgtt cccgccctgg 1080

atggcgggct gtgcgggagg gcgaggggggg gaggcctggc ggcggccccg gagcctcgcc 1140

tcgtgtcggg cgtgaggcct agcgtggctt ccgccccgcc gcgtgccacc gcggccgcgc 1200

tttgctgtct gcccggctgc cctcgattgc ctgcccgcgg cccgggccaa caaagggagg 1260

gcgtggagct ggctggtagg gagccccgta gtccgcatgt cgggcaggga gagcggcagc 1320

agtcgggggg gggaccgggc ccgcccgtcc cgcagcacat gtccgacgcc gcctggacgg 1380

gtagcggcct gtgtcctgat aaggcggccg ggcggtgggt tttagatgcc gggttcaggt 1440

ggccccgggt cccggcccgg tctggccagt accccgtagt ggcttagctc cgaggagggc 1500

gagcccgccc gcccggcacc agttgcgtgc gcggaaagat ggccgctccc gggccctgta 1560

gcaaggagct caaaatggag gacgcggcag cccggcggag cggggcgggt gagtcaccca 1620

cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc cgtggtgtac 1680

cggccgcact tcagtcaccc cgggcgctct ttcggagcac cgctggcctc cgctggggga 1740

ggggatctgt ctaatggcgt tggagtttgc tcacatttgg tgggtggaga ctgtagccag 1800

gccagcctgg ccatggaagt aattcttgga atttgcccat tttgagtttg gagcgaagct 1860

gattgacaaa gctgcttagc cgttcaaagg tattcttcga actttttttt taaggtgttg 1920

tgaaaaccac cgctaattca aatccaacag cttgcttgtt ctttttgcag aagctcagaa 1980

taaacgctca actttggccg ccacc 2005

<210> 767
<211> 2186
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 767
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aacctctccc ggccagagga gcaaggtatg cgggaggcga 720

ccaggaggat agcggggctg acgtcgggag gtggcctccg tgggaaggac acccggatct 780

tgacacagcc ttggcagcgg agtcaggaag agtaggggta ggttctggac gccctcttgg 840

ccagctcatc gccgccccac cctctgctgg agcacagagt aattcataca aaaggaggga 900

tcgccttcgc aaggggagag cccagggacc gtccctaaat tctcacagac ccaaatccct 960

gtagccgccc cacgacagcg cgaggagcat gcgcccaggg ctgagcgcgg gtagatcaga 1020

gcacacaagc tcacagtccc cggcggtggg gggaggggcg cgctgagcgg gggccaggga 1080

gctggcgcgg ggcaaactgg gaaagtggtg tcgtgtgctg gctccgccct cttcccgagg 1140

gtgggggaga acggtatata agtgcggtag tcgccttgga cgttcttttt cgcaacgggt 1200

ttgccgtcag aacgcaggtg agtggcgggt gtggcttccg cgggccccgg agctggagcc 1260

ctgctctgag cgggccgggc tgatatgcga gtgtcgtccg cagggtttag ctgtgagcat 1320

tcccacttcg agtggcgggc ggtgcggggg tgagagtgcg aggcctagcg gcaaccccgt 1380

agcctcgcct cgtgtccggc ttgaggccta gcgtggtgtc cgccgccgcg tgccactccg 1440

gccgcactat gcgtttttg tccttgctgc cctcgattgc cttccagcag catgggctaa 1500

caaagggagg gtgtggggct cactcttaag gagcccatga agcttacgtt ggataggaat 1560

ggaagggcag gaggggcgac tggggcccgc ccgccttcgg agcacatgtc cgacgccacc 1620

tggatggggc gaggcctgtg gctttccgaa gcaatcgggc gtgagtttag cctacctggg 1680

ccatgtggcc ctagcactgg gcacggtctg gcctggcggt gccgcgttcc cttgcctccc 1740

aacaagggtg aggccgtccc gcccggcacc agttgcttgc gcggaaagat ggccgctccc 1800

ggggccctgt tgcaaggagc tcaaaatgga ggacgcggca gcccggtgga gcgggcgggt 1860

gagtcaccca cacaaaggaa gagggccttg cccctcgccg gccgctgctt cctgtgaccc 1920

cgtggtctat cggccgcata gtcacctcgg gcttctcttg agcaccgctc gtcgcggcgg 1980

ggggagggga tctaatggcg ttggagtttg ttcacatttg gtgggtggag actagtcagg 2040

ccagcctggc gctggaagtc attcttggaa tttgcccctt tgagtttgga gcgaggctaa 2100

ttctcaagcc tcttagcggt tcaaagtttt tttcttccat ttcaggtgtt gtgaaagcca 2160

ccgctaattc aaagcaagcc gccacc 2186

<210> 768
<211> 2139
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 768
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aaagcggggc tgacgtcggg aggtggcctc cgtgggaagg 720

gacacccgga tcttgacaca gccttggcag cggagtaagg aagagtaggg atagattctg 780

gccgccctct tggccagctt ctcgccgccc caccctccgc tagggccaag agtaattcat 840

acaaaaggag ggatcgcctt cgcaagggga gagcccaggg accgtcccta aattctcaca 900

gacccaaatc cctgtagccg ccccacgaca gcgcgaggag catgcgctca gggctgagcg 960

cggggagagc agagcacaca agctcataga ccctggtcgt gggggggagg accggggagc 1020

tggcgcgggg caaactggga aagcggtgtc gtgtgctggc tccgccctct tcccgagggt 1080

gggggagaac ggtatataag tgcggcagtc gccttggacg ttctttttcg caacgggttt 1140

gccgtcagaa cgcaggtgag gggcgggtgt ggcttccgcg ggccgccgag ctggaggtcc 1200

tgctccgagc gggccgggcc ccgctgtcgt cggcggggat tagctgcgag cattcccgct 1260

tcgagttgcg ggcggcgcgg gaggcagagt gcgaggccta gcggcaaccc cgtagcctcg 1320

cctcgtgtcc ggcttgaggc ctagcgtggt gtccgcgccg ccgccgcgtg ctactccggc 1380

cgcactctgg tctttttttt tttgttgttg ttgccctgct gccttcgatt gccgttcagc 1440

aataggggct aacaaaggga gggtgcgggg cttgctcgcc cggagcccgg agaggtcatg 1500

gttggggagg aatggaggga caggagtggc ggctggggcc cgcccgcctt cggagcacat 1560

gtccgacgcc acctggatgg ggcgaggcct ggggtttttc ccgaagcaac caggctgggg 1620

ttagcgtgcc gaggccatgt ggccccagca cccggcacga tctggcttgg cggcgccgcg 1680

ttgccctgcc tccctaacta gggtgaggcc atcccgtccg gcaccagttg cgtgcgtgga 1740

aagatggccg ctcccgggcc ctgttgcaag gagctcaaaa tggaggacgc ggcagcccgg 1800

tggagcgggc gggtgagtca cccacacaaa ggaagagggc ctggtccctc accggctgct 1860

gcttcctgtg accccgtggt cctatcggcc gcaatagtca cctcgggctt ttgagcacgg 1920

ctagtcgcgg cgggggggagg ggatgtaatg gcgttggagt ttgttcacat ttggtgggtg 1980

gagactagtc aggccagcct ggcgctggaa gtcatttttg gaatttgtcc ccttgagttt 2040

tgagcggagc taattctcgg gcttcttagc ggttcaaagt ttttttcttc catttcaggt 2100

gttgtgaaaa ccaccgctaa ttcaaagcaa gccgccacc 2139

<210> 769
<211> 2232
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 769
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaattgcca gccatctgtt gtttgcccct 120

cccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc taataaaatg 180

aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggggt ggggtggggc 240

aggacagcaa gggggaggat tgggaataca atagcaggca tgctggggat gcggtgggct 300

ctatgggtac ccaggtgctg aagaattgac ccggttcctc ctgggatatt atccctaata 360

cttgccaccc cactcttaat cagtggtgga agaacggtgt cagaactgtt tgtttcaatt 420

ggccatttaa gtttagtagt aaaagactgg ttaatgataa caatgcatcg taaaaccttc 480

agaaggaaag gagaatgttt tgtggaccac tttggttttc ttttttgcgt gtggcagttt 540

taagttatta gtttttaaaa tcagtacttt ttaatggaaa caacttgacc aaaaatttgt 600

cacagaattt tgagatccat taaaaaagtt aaatgagaaa cctgtgtgtt cctttggtca 660

acaccgagac atttaggtga aagaaacttg atctgtcgcc gcaattcaag cttcgtgagg 720

ctccggtgcc cgtcagtgac ctgctataga caagcagggg atggcggggc tgacgtcggg 780

aggtggcctc cacgggaagg gacacccgga tctcgacaca gccttggcag tggagtcagg 840

aagggtagga cagattctgg acgccctctt ggccagtcct caccgcccca cccccgatgg 900

agccgagagt aattcataca aaaggaggga tcgccttcgc ccctgggaat cccagggacc 960

gtcgctaaat tctggccggc ctcccagccc ggaaccgctg tgcccgccca gcgcggcggg 1020

aggagcctgc gcctagggcg gatcgcgggt cggcgggaga gcacaagccc acagtccccg 1080

gcggtggggg aggggcgcgc tgagcggggg cccgggagcc agcgcggggc aaactgggaa 1140

agtggtgtcg tgtgctggct ccgccctctt cccgagggtg ggggagaacg gtataaaagt 1200

gcggtagtcg cgttggacgt tctttttcgc aacgggtttg ccgtcagaac gcaggtgagt 1260

ggcgggtgtg gcctccgcgg gcccgggctc cctcctttga gcggggtcgg accgccgtgc 1320

gggtgtcgtc ggccgggctt ctctgcgagc gttcccgccc tggatggcgg gctgtgcggg 1380

agggcgaggg ggggaggcct ggcggcggcc ccggagcctc gcctcgtgtc gggcgtgagg 1440

cctagcgtgg cttccgcccc gccgcgtgcc accgcggccg cgctttgctg tctgcccggc 1500

tgccctcgat tgcctgcccg cggcccgggc caacaaaggg agggcgtgga gctggctggt 1560

agggagcccc gtagtccgca tgtcgggcag ggagagcggc agcagtcggg ggggggaccg 1620

ggcccgcccg tcccgcagca catgtccgac gccgcctgga cgggtagcgg cctgtgtcct 1680

gataaggcgg ccgggcggtg ggttttagat gccgggttca ggtggccccg ggtcccggcc 1740

cggtctggcc agtaccccgt agtggcttag ctccgaggag ggcgagcccg cccgcccggc 1800

accagttgcg tgcgcggaaa gatggccgct cccgggccct gtagcaagga gctcaaaatg 1860

gaggacgcgg cagcccggcg gagcggggcg ggtgagtcac ccacacaaag gaagagggcc 1920

ttgcccctcg ccggccgctg cttcctgtga ccccgtggtg taccggccgc acttcagtca 1980

ccccgggcgc tctttcggag caccgctggc ctccgctggg ggaggggatc tgtctaatgg 2040

cgttggagtt tgctcacatt tggtgggtgg agactgtagc caggccagcc tggccatgga 2100

agtaattctt ggaatttgcc cattttgagt ttggagcgaa gctgattgac aaagctgctt 2160

agccgttcaa agttttttc ttccatttca ggtgttgtga aaaccaccgc taattcaaag 2220

caagccgcca cc 2232

<210> 770
<211> 2252
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 770
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagtttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaacc tctcccggcc agaggagcaa ggtatgcggg 780

aggcgaccag gaggatagcg gggctgacgt cgggaggtgg cctccgtggg aaggacaccc 840

ggatcttgac acagccttgg cagcggagtc aggaagagta ggggtaggtt ctggacgccc 900

tcttggccag ctcatcgccg ccccaccctc tgctggagca cagagtaatt catacaaaag 960

gagggatcgc cttcgcaagg ggagagccca gggaccgtcc ctaaattctc acagacccaa 1020

atccctgtag ccgccccacg acagcgcgag gagcatgcgc ccagggctga gcgcgggtag 1080

atcagagcac acaagctcac agtccccggc ggtgggggga ggggcgcgct gagcgggggc 1140

cagggagctg gcgcggggca aactgggaaa gtggtgtcgt gtgctggctc cgccctcttc 1200

ccgagggtgg gggagaacgg tatataagtg cggtagtcgc cttggacgtt ctttttcgca 1260

acgggtttgc cgtcagaacg caggtgagtg gcgggtgtgg cttccgcggg ccccggagct 1320

ggagccctgc tctgagcggg ccgggctgat atgcgagtgt cgtccgcagg gtttagctgt 1380

gagcattccc acttcgagtg gcgggcggtg cgggggtgag agtgcgaggc ctagcggcaa 1440

ccccgtagcc tcgcctcgtg tccggcttga ggcctagcgt ggtgtccgcc gccgcgtgcc 1500

actccggccg cactatgcgt tttttgtcct tgctgccctc gattgccttc cagcagcatg 1560

ggctaacaaa gggagggtgt ggggctcact cttaaggagc ccatgaagct tacgttggat 1620

aggaatggaa gggcaggagg ggcgactggg gcccgcccgc cttcggagca catgtccgac 1680

gccacctgga tggggcgagg cctgtggctt tccgaagcaa tcgggcgtga gtttagccta 1740

cctgggccat gtggccctag cactgggcac ggtctggcct ggcggtgccg cgttcccttg 1800

cctcccaaca agggtgaggc cgtcccgccc ggcaccagtt gcttgcgcgg aaagatggcc 1860

gctcccgggg ccctgttgca aggagctcaa aatggaggac gcggcagccc ggtggagcgg 1920

gcgggtgagt cacccacaca aaggaagagg gccttgcccc tcgccggccg ctgcttcctg 1980

tgaccccgtg gtctatcggc cgcatagtca cctcgggctt ctcttgagca ccgctcgtcg 2040

cggcgggggg aggggatcta atggcgttgg agtttgttca catttggtgg gtggagacta 2100

gtcaggccag cctggcgctg gaagtcattc ttggaatttg ccccttttgag tttggagcga 2160

ggctaattct caagcctctt agcggttcaa agtttttttc ttccatttca ggtgttgtga 2220

aagccaccgc taattcaaag caagccgcca cc 2252

<210> 771
<211> 2205
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 771
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagcccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagtttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaaag cggggctgac gtcgggaggt ggcctccgtg 780

ggaagggaca cccggatctt gacacagcct tggcagcgga gtaaggaaga gtagggatag 840

attctggccg ccctcttggc cagcttctcg ccgccccacc ctccgctagg gccaagagta 900

attcatacaa aaggagggat cgccttcgca aggggagagc ccagggaccg tccctaaatt 960

ctcacagacc caaatccctg tagccgcccc acgacagcgc gaggagcatg cgctcagggc 1020

tgagcgcggg gagagcagag cacacaagct catagaccct ggtcgtgggg gggaggaccg 1080

gggagctggc gcggggcaaa ctgggaaagc ggtgtcgtgt gctggctccg ccctcttccc 1140

gagggtgggg gagaacggta tataagtgcg gcagtcgcct tggacgttct ttttcgcaac 1200

gggtttgccg tcagaacgca ggtgaggggc gggtgtggct tccgcgggcc gccgagctgg 1260

aggtcctgct ccgagcgggc cgggccccgc tgtcgtcggc ggggattagc tgcgagcatt 1320

cccgcttcga gttgcgggcg gcgcgggagg cagagtgcga ggcctagcgg caaccccgta 1380

gcctcgcctc gtgtccggct tgaggcctag cgtggtgtcc gcgccgccgc cgcgtgctac 1440

tccggccgca ctctggtctt ttttttttg ttgttgttgc cctgctgcct tcgattgccg 1500

ttcagcaata ggggctaaca aagggagggt gcggggcttg ctcgcccgga gcccggagag 1560

gtcatggttg gggaggaatg gagggacagg agtggcggct ggggcccgcc cgccttcgga 1620

gcacatgtcc gacgccacct ggatggggcg aggcctgggg tttttcccga agcaaccagg 1680

ctggggttag cgtgccgagg ccatgtggcc ccagcacccg gcacgatctg gcttggcggc 1740

gccgcgttgc cctgcctccc taactagggt gaggccatcc cgtccggcac cagttgcgtg 1800

cgtggaaaga tggccgctcc cgggccctgt tgcaaggagc tcaaaatgga ggacgcggca 1860

gcccggtgga gcgggcgggt gagtcaccca cacaaaggaa gagggcctgg tccctcaccg 1920

gctgctgctt cctgtgaccc cgtggtccta tcggccgcaa tagtcacctc gggcttttga 1980

gcacggctag tcgcggcggg gggaggggat gtaatggcgt tggagtttgt tcacatttgg 2040

tgggtggaga ctagtcaggc cagcctggcg ctggaagtca tttttggaat ttgtcccctt 2100

gagttttgag cggagctaat tctcgggctt cttagcggtt caaagttttt ttcttccatt 2160

tcaggtgttg tgaaaaccac cgctaattca aagcaagccg ccacc 2205

<210> 772
<211> 2298
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 772
gctggagcct cggtagccgt tcctcctgcc cgctgggcct cccaacgggc cctcctcccc 60

tccttgcacc ggcccttcct ggtctttgaa taaatggcta ataaaggaaa tttattttca 120

ttgcaatagt gtgttggaat tttttgtgtc tctcactcgg aagaacatat gggagggcaa 180

atcatttaaa acatcagaat gagtatttgg tttagagttt ggcaacatat gcccatatgc 240

tggctgccat gaacaaaggt tggctataaa gaggtcatca gtatatgaaa cagccccctg 300

ctgtccattc cttattccat agaaaagcct tgacttgagg ttagattttt tttatatttt 360

gttttgtgtt attttttttct ttaacatccc taaaattttc cttacatgtt ttactagcca 420

gatttttcct cctctcctga ctactcccag tcatagctgt ccctcttctc ttatggagat 480

catattaccc ctaacacctg ccaccccagt cttaatcagt ggtggaagaa ctctcagaac 540

tgtttgtctc aattggccat ttaagtttaa tagtgaaaga ctggttaatg ataacaatgc 600

atcggaaaac cttcaggagg aaaggagaat gttttgtgga acatttttgt gtgtgtggca 660

gttttaagtt attagttttc aaaatcagta ctttttaatg gaaacaactt gaccaaaaat 720

ctgtcacaga attttgaacc cattaaaaga aacttgatct gtcgccgcaa ttcaagcttc 780

gtgaggctcc ggtgcccgtc agtgacctgc tatagacaag caggggatgg cggggctgac 840

gtcgggaggt ggcctccacg ggaagggaca cccggatctc gacacagcct tggcagtgga 900

gtcaggaagg gtaggacaga ttctggacgc cctcttggcc agtcctcacc gccccacccc 960

cgatggagcc gagagtaatt catacaaaag gagggatcgc cttcgcccct gggaatccca 1020

gggaccgtcg ctaaattctg gccggcctcc cagcccggaa ccgctgtgcc cgcccagcgc 1080

ggcgggagga gcctgcgcct agggcggatc gcgggtcggc gggagagcac aagcccacag 1140

tccccggcgg tgggggaggg gcgcgctgag cgggggcccg ggagccagcg cggggcaaac 1200

tgggaaagtg gtgtcgtgtg ctggctccgc cctcttcccg agggtggggg agaacggtat 1260

aaaagtgcgg tagtcgcgtt ggacgttctt tttcgcaacg ggtttgccgt cagaacgcag 1320

gtgagtggcg ggtgtggcct ccgcgggccc gggctccctc ctttgagcgg ggtcggaccg 1380

ccgtgcgggt gtcgtcggcc gggcttctct gcgagcgttc ccgccctgga tggcgggctg 1440

tgcgggaggg cgaggggggg aggcctggcg gcggccccgg agcctcgcct cgtgtcgggc 1500

gtgaggccta gcgtggcttc cgccccgccg cgtgccaccg cggccgcgct ttgctgtctg 1560

cccggctgcc ctcgattgcc tgcccgcggc ccgggccaac aaagggaggg cgtggagctg 1620

gctggtaggg agccccgtag tccgcatgtc gggcagggag agcggcagca gtcgggggggg 1680

ggaccgggcc cgcccgtccc gcagcacatg tccgacgccg cctggacggg tagcggcctg 1740

tgtcctgata aggcggccgg gcggtgggtt ttagatgccg ggttcaggtg gccccgggtc 1800

ccggcccggt ctggccagta ccccgtagtg gcttagctcc gaggagggcg agcccgcccg 1860

cccggcacca gttgcgtgcg cggaaagatg gccgctcccg ggccctgtag caaggagctc 1920

aaaatggagg acgcggcagc ccggcggagc ggggcgggtg agtcacccac acaaaggaag 1980

agggccttgc ccctcgccgg ccgctgcttc ctgtgacccc gtggtgtacc ggccgcactt 2040

cagtcacccc gggcgctctt tcggagcacc gctggcctcc gctgggggag gggatctgtc 2100

taatggcgtt ggagtttgct cacatttggt gggtggagac tgtagccagg ccagcctggc 2160

catggaagta attcttggaa tttgcccatt ttgagtttgg agcgaagctg attgacaaag 2220

ctgcttagcc gttcaaagtt tttttcttcc atttcaggtg ttgtgaaaac caccgctaat 2280

tcaaagcaag ccgccacc 2298

<210> 773
<211> 1953
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 773
taatcgagta cgatagccgg ctaatcagcc ataccacatt tgtagaggtt ttacttgctt 60

taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca attgttgttg 120

ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc acaaatttca 180

caaataaagc atttttttca ctgcattcta gttgtggttt gtccaaactc atcaatgtat 240

cttatcatgt ctggaattcg gacggtgact gcagtgaata ataaaatgtg tgtttgtccg 300

aaatacgcgt tttgagattt ctgtcgccga ctaaattcat gtcgcgcgat agtggtgttt 360

atcgccgata gagatggcga tattggaaaa atcgatattt gaaaatatgg catattgaaa 420

atgtcgccga tgtgagtttc tgtgtaactg atatcgccat ttttccaaaa gtgatttttg 480

ggcatacgcg atatctggcg atagcgctta tatcgtttac gggggatggc gatagacgac 540

tttggtgact tgggcgattc tgtgtgtcgc aaatatcgca gtttcgatat aggtgacaga 600

cgatatgagg ctatatcgcc gatagaggcg acatcaagct ggcacatggc caatgcatat 660

cgatctatac attgaatcaa tattggccat tagccatatt attcattggt tatatagcat 720

aaatcaatat tggctattgg ccattgcata cgttgtatcc atatcataat atgtacattt 780

atattggctc atgtccaaca ttaccgccat gttgacattg attattgact agttattaat 840

agtaatcaat tacggggtca ttagttcata gcccatatat ggagttccgc gttacataac 900

ttacggtaaa tggcccgcct ggctgaccgc ccaacgaccc ccgcccattg acgtcaataa 960

tgacgtatgt tcccatagta acgccaatag ggactttcca ttgacgtcaa tgggtggagt 1020

atttacggta aactgcccac ttggcagtac atcaagtgta tcatatgcca agtacgcccc 1080

ctattgacgt caatgacggt aaatggcccg cctggcatta tgcccagtac atgaccttat 1140

gggactttcc tacttggcag tacatctacg tattagtcat cgctattacc atggtgatgc 1200

ggttttggca gtacatcaat gggcgtggat agcggtttga ctcacgggga tttccaagtc 1260

tccaccccat tgacgtcaat gggagtttgt tttggcacca aaatcaacgg gactttccaa 1320

aatgtcgtaa caactccgcc ccattgacgc aaatgggcgg taggcgtgta cggtgggagg 1380

tctatataag cagagctcgt ttagtgaacc gtcagatcct cactctcttc cgcatcgctg 1440

tctgcgaggg ccagctgttg ggctcgcggt tgaggacaaa ctcttcgcgg tctttccagt 1500

actcttggat cggaaacccg tcggcctccg aacggtactc cgccaccgag ggacctgagc 1560

gagtccgcat cgaccggatc ggaaaacctc tcgagaaagg cgtctaacca gtcacagtcg 1620

caaggtaggc tgagcaccgt ggcgggcggc agcgggtggc ggtcggggtt gtttctggcg 1680

gaggtgctgc tgatgatgta attaaagtag gcggtcttga gacggcggat ggtcgaggtg 1740

aggtgtggca ggcttgagat ccagctgttg gggtgagtac tccctctcaa aagcgggcat 1800

tacttctgcg ctaagattgt cagtttccaa aaacgaggag gatttgatat tcacctggcc 1860

cgatctggcc atacacttga gtgacaatga catccacttt gcctttctct ccacaggtgt 1920

ccactcccag gtccaagttt aaacgccgcc acc 1953

<210> 774
<211> 1881
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 774
taatcgagta cgatagccgg ctaatcagcc ataccacatt tgtagaggtt ttacttgctt 60

taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca attgttgttg 120

ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc acaaatttca 180

caaataaagc attttttca ctgcattcta gttgtggttt gtccaaactc atcaatgtat 240

cttatcatgt ctggaattcg gacggtgact gcagtgaata ataaaatgtg tgtttgtccg 300

aaatacgcgt tttgagattt ctgtcgccga ctaaattcat gtcgcgcgat agtggtgttt 360

atcgccgata gagatggcga tattggaaaa atcgatattt gaaaatatgg catattgaaa 420

atgtcgccga tgtgagtttc tgtgtaactg atatcgccat ttttccaaaa gtgatttttg 480

ggcatacgcg atatctggcg atagcgctta tatcgtttac gggggatggc gatagacgac 540

tttggtgact tgggcgattc tgtgtgtcgc aaatatcgca gtttcgatat aggtgacaga 600

cgatatgagg ctatatcgcc gatagaggcg acatcaagct ggcacatggc caatgcatat 660

cgatctatac attgaatcaa tattggccat tagccatatt attcattggt tatatagcat 720

aaatcaatat tggctattgg ccattgcata cgttgtatcc atatcataat atgtacattt 780

atattggctc atgtccaaca ttaccgccat gttgacatct ggccgccata tactgagtca 840

ttagggactt tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg 900

aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg gttttgccca 960

gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa 1020

ggtcaatagg ggtgagtcat tgggtttttc cagccaattt ataaaacgct gctgatgcgg 1080

ttttggcagt acaccaatgg gcgtggatag cggtttgact cacggggatt tccaagtctc 1140

caccccattg acgtcaatgg gagtttgttt tggcaccaaa atcaacggga ctttccaaaa 1200

tgtcgtaata accccgcccc gttgacgcaa atgggcggta ggcgtgtacg gtgggaggtc 1260

tatataagca gagctcgttt agtgaaccgt cagatcctca ctcactctct tccgcatcgc 1320

tgtctgcgag ggccagctgt tgggctcgcg gttgaggaca aactcttcgc ggtctttcca 1380

gtactcttgg atcggaaacc cgtcggcctc cgaacggtac tccgccaccg agggacctga 1440

gcgagtccgc atcgaccgga tcggaaaacc tctcgagaaa ggcgtctaac cagtcacagt 1500

cgcaaggtag gctgagcacc gtggcgggcg gcagcgggtg gcggtcgggg ttgtttctgg 1560

cggaggtgct gctgatgatg taattaaagt aggcggtctt gagactgcgg atggtcgagg 1620

tgaggtgtgg caggcttgag atccagctgt tggggtgagt actccctctc aaaagcgggc 1680

attacttctg cgctaagatt gtcagtttcc aaaaacgagg aggatttgat attcacctgg 1740

cccgatctgg ccatacactt gagtgacaat gacatccact ttgcctttct ctccacaggt 1800

gtccactccc agcgtctcag gggagcttcc ttcttctttt tcctagaagc tcagaataaa 1860

cgctcaactt tggccgccac c 1881

<210> 775
<211> 1926
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 775
taatcgagta cgatagccgg ctaatcagcc ataccacatt tgtagaggtt ttacttgctt 60

taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca attgttgttg 120

ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc acaaatttca 180

caaataaagc attttttca ctgcattcta gttgtggttt gtccaaactc atcaatgtat 240

cttatcatgt ctggaattcg gacggtgact gcagtgaata ataaaatgtg tgtttgtccg 300

aaatacgcgt tttgagattt ctgtcgccga ctaaattcat gtcgcgcgat agtggtgttt 360

atcgccgata gagatggcga tattggaaaa atcgatattt gaaaatatgg catattgaaa 420

atgtcgccga tgtgagtttc tgtgtaactg atatcgccat ttttccaaaa gtgatttttg 480

ggcatacgcg atatctggcg atagcgctta tatcgtttac gggggatggc gatagacgac 540

tttggtgact tgggcgattc tgtgtgtcgc aaatatcgca gtttcgatat aggtgacaga 600

cgatatgagg ctatatcgcc gatagaggcg acatcaagct ggcacatggc caatgcatat 660

cgatctatac attgaatcaa tattggccat tagccatatt attcattggt tatatagcat 720

aaatcaatat tggctattgg ccattgcata cgttgtatcc atatcataat atgtacattt 780

atattggctc atgtccaaca ttaccgccat gttgacatct ggccgccata tactgagtca 840

ttagggactt tccaatgggt tttgcccagt acataaggtc aatagggggtg aatcaacagg 900

aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg gttttgccca 960

gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa 1020

ggtcaatagg ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc 1080

ccaccattga cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt 1140

cccatagctg attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga 1200

aagggcagcc aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc 1260

attctattgg ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaccg 1320

ccgtcgcagt cttgggtctg accacctcac tctcttccgc atcgctgtct gcgagggcca 1380

gctgttgggc tcgcggttga ggacaaactc ttcgcggtct ttccagtact cttggatcgg 1440

aaacccgtcg gcctccgaac ggtactccgc caccgaggga cctgagcgag tccgcatcga 1500

ccggatcgga aaacctctcg agaaaggcgt ctaaccagtc acagtcgcaa ggtaggctga 1560

gcaccgtggc gggcggcagc gggtggcggt cggggttgtt tctggcggag gtgctgctga 1620

tgatgtaatt aaagtaggcg gtcttgagac tgcggatggt cgaggtgagg tgtggcaggc 1680

ttgagatcca gctgttgggg tgagtactcc ctctcaaaag cgggcattac ttctgcgcta 1740

agattgtcag tttccaaaaa cgaggaggat ttgatattca cctggcccga tctggccata 1800

cacttgagtg acaatgacat ccactttgcc tttctctcca caggtgtcca ctcccagcgt 1860

ctcaggggag cttccttctt ctttttcctа gaagctcaga ataaacgctc aactttggcc 1920

gccacc 1926

<210> 776
<211> 1713
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 776
taatcgagta cgatagccgg ctaatcagcc ataccacatt tgtagaggtt ttacttgctt 60

taaaaaacct cccacacctc cccctgaacc tgaaacataa aatgaatgca attgttgttg 120

ttaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc acaaatttca 180

caaataaagc atttttttca ctgcattcta gttgtggttt gtccaaactc atcaatgtat 240

cttatcatgt ctggaattcg gacggtgact gcagtgaata ataaaatgtg tgtttgtccg 300

aaatacgcgt tttgagattt ctgtcgccga ctaaattcat gtcgcgcgat agtggtgttt 360

atcgccgata gagatggcga tattggaaaa atcgatattt gaaaatatgg catattgaaa 420

atgtcgccga tgtgagtttc tgtgtaactg atatcgccat ttttccaaaa gtgatttttg 480

ggcatacgcg atatctggcg atagcgctta tatcgtttac gggggatggc gatagacgac 540

tttggtgact tgggcgattc tgtgtgtcgc aaatatcgca gtttcgatat aggtgacaga 600

cgatatgagg ctatatcgcc gatagaggcg acatcaagct ggcacatggc caatgcatat 660

cgatctatac attgaatcaa tattggccat tagccatatt attcattggt tatatagcat 720

aaatcaatat tggctattgg ccattgcata cgttgtatcc atatcataat atgtacattt 780

atattggctc atgtccaaca ttaccgccat gttgacatct ggccgccata tactgagtca 840

ttagggactt tccaatgggt tttgcccagt acataaggtc aataggggtg aatcaacagg 900

aaagtcccat tggagccaag tacactgagt caatagggac tttccattgg gttttgccca 960

gtacaaaagg tcaatagggg gtgagtcaat gggtttttcc cattattggc acgtacataa 1020

ggtcaatagg ggtgagtcat tgggtttttc cagccaattt ataaaacgcc atgtactttc 1080

ccaccattga cgtcaatggg ctattgaaac taatgcaacg tgacctttaa acggtacttt 1140

cccatagctg attaatggga aagtaccgtt ctcgagccaa tacacgtcaa tgggaagtga 1200

aagggcagcc aaaacgtaac accgccccgg ttttcccctg gaaattccat attggcacgc 1260

attctattgg ctgagctgcg ttctacgtgg gtataagagg cgcgaccagc gtcggtaccg 1320

ccgtcgcagt cttgggtctg accacatcca cgctgttttg acctccatag tggacaccgg 1380

gaccgatcca gcctccgcgg ccgggaacgg tgcattggaa cgcggattcc ccgtgccaag 1440

agtgaccctg gcagaactcg gtaagtctgt tgacatgtat gtgatgtata ctaacctgca 1500

tgggacgtgg atttacttgt gtatgtcaga tagagtaaag attaactctt gcatgtgagc 1560

ggggcatcga gatagcgata aatgagtcag gaggacggat acttatatgt gttgttatcc 1620

tcctctacag tcaaacagat taagcgtctc aggggagctt ccttcttctt tttcctagaa 1680

gctcagaata aacgctcaac tttggccgcc acc 1713

<210> 777
<211> 2158
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 777
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaaga acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag atttttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatcata ttacccctaa cacctgccac cccagtctta 420

atcagtggtg gaagaactct cagaactgtt tgtctcaatt ggccatttaa gtttaatagt 480

gaaagactgg ttaatgataa caatgcatcg gaaaaccttc aggaggaaag gagaatgttt 540

tgtggaacat ttttgtgtgt gtggcagttt taagttatta gttttcaaaa tcagtacttt 600

ttaatggaaa caacttgacc aaaaatctgt cacagaattt tgaacccatt aaaacctctc 660

ccggccagag gagcaaggta tgcgggaggc gaccaggagg atagcggggc tgacgtcggg 720

aggtggcctc cgtgggaagg acacccggat cttgacacag ccttggcagc ggagtcagga 780

agagtagggg taggttctgg acgccctctt ggccagctca tcgccgcccc accctctgct 840

ggagcacaga gtaattcata caaaaggagg gatcgccttc gcaaggggag agcccaggga 900

ccgtccctaa attctcacag acccaaatcc ctgtagccgc cccacgacag cgcgaggagc 960

atgcgcccag ggctgagcgc gggtagatca gagcacacaa gctcacagtc cccggcggtg 1020

gggggagggg cgcgctgagc gggggccagg gagctggcgc ggggcaaact gggaaagtgg 1080

tgtcgtgtgc tggctccgcc ctcttcccga gggtggggga gaacggtata taagtgcggt 1140

agtcgccttg gacgttcttt ttcgcaacgg gtttgccgtc agaacgcagg tgagtggcgg 1200

gtgtggcttc cgcgggcccc ggagctggag ccctgctctg agcgggccgg gctgatatgc 1260

gagtgtcgtc cgcagggttt agctgtgagc attcccactt cgagtggcgg gcggtgcggg 1320

ggtgagagtg cgaggcctag cggcaacccc gtagcctcgc ctcgtgtccg gcttgaggcc 1380

tagcgtggtg tccgccgccg cgtgccactc cggccgcact atgcgttttt tgtccttgct 1440

gccctcgatt gccttccagc agcatgggct aacaaaggga gggtgtgggg ctcactctta 1500

aggagcccat gaagcttacg ttggatagga atggaagggc aggaggggcg actggggccc 1560

gcccgccttc ggagcacatg tccgacgcca cctggatggg gcgaggcctg tggctttccg 1620

aagcaatcgg gcgtgagttt agcctacctg ggccatgtgg ccctagcact gggcacggtc 1680

tggcctggcg gtgccgcgtt cccttgcctc ccaacaaggg tgaggccgtc ccgcccggca 1740

ccagttgctt gcgcggaaag atggccgctc ccggggccct gttgcaagga gctcaaaatg 1800

gaggacgcgg cagcccggtg gagcgggcgg gtgagtcacc cacacaaagg aagagggcct 1860

tgcccctcgc cggccgctgc ttcctgtgac cccgtggtct atcggccgca tagtcacctc 1920

gggcttctct tgagcaccgc tcgtcgcggc ggggggaggg gatctaatgg cgttggagtt 1980

tgttcacatt tggtgggtgg agactagtca ggccagcctg gcgctggaag tcattcttgg 2040

aatttgcccc tttgagtttg gagcgaggct aattctcaag cctcttagcg gttcaaagtt 2100

tttttcttcc atttcaggtg ttgtgaaagc caccgctaat tcaaagcaag ccgccacc 2158

<210> 778
<211> 1752
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 778
ttgccagcca tctgttgttt gcccctcccc cgtgccttcc ttgaccctgg aaggtgccac 60

tcccactgtc ctttcctaat aaaatgagga aattgcatcg cattgtctga gtaggtgtca 120

ttctattctg gggggtgggg tggggcagga cagcaagggg gaggattggg aatacaatag 180

caggcatgct ggggatgcgg tgggctctat gggtacccag gtgctgaaga attgacccgg 240

ttcctcctgg gatattatcc ctaatacttg ccaccccact cttaatcagt ggtggaagaa 300

cggtgtcaga actgtttgtt tcaattggcc atttaagttt agtagtaaaa gactggttaa 360

tgataacaat gcatcgtaaa accttcagaa ggaaaggaga atgttttgtg gaccactttg 420

gttttctttt ttgcgtgtgg cagttttaag ttattagttt ttaaaatcag tacttttttaa 480

tggaaacaac ttgaccaaaa atttgtcaca gaattttgag atccattaaa aaagttaaat 540

gagaaacctg tgtgttcctt tggtcaacac cgagacattt aggtgaaaga attcgtttat 600

cggccaccga ggccaagatc tggccgccag ccaagatctg gccgccatat actgagtcat 660

tagggacttt ccaatgggtt ttgcccagta cataaggtca ataggggtga atcaacagga 720

aagtcccatt ggagccaagt acactgagtc aatagggact ttccattggg ttttgcccag 780

tacaaaaggt caatagggggg tgagtcaatg ggtttttccc attattggca cgtacataag 840

gtcaataggg gtgagtcatt gggtttttcc agccaattta taaaacgcca tgtactttcc 900

caccattgac gtcaatgggc tattgaaact aatgcaacgt gacctttaaa cggtactttc 960

ccatagctga ttaatgggaa agtaccgttc tcgagccaat acacgtcaat gggaagtgaa 1020

agggcagcca aaacgtaaca ccgccccggt tttcccctgg aaattccata ttggcacgca 1080

ttctattggc tgagctgcgt tctacgtggg tataagaggc gcgaccagcg tcggtaggga 1140

ccggtttgcc gccagaacac agtcagatcc tcactctctt ccgcatcgct gtctgcgagg 1200

gccagctgtt gggctcgcgg ttgaggacaa actcttcgcg gtctttccag tactcttgga 1260

tcggaaaccc gtcggcctcc gaacggtact ccgccaccga gggacctgag cgagtccgca 1320

tcgaccggat cggaaaacct ctcgagaaag gcgtctaacc agtcacagtc gcaaggtagg 1380

ctgagcaccg tggcgggcgg cagcgggtgg cggtcggggt tgtttctggc ggaggtgctg 1440

ctgatgatgt aattaaagta ggcggtcttg agacggcgga tggtcgaggt gaggtgtggc 1500

aggcttgaga tccagctgtt ggggtgagta ctccctctca aaagcgggca ttacttctgc 1560

gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc ccgatctggc 1620

catacacttg agtgacaatg acatccactt tgcctttctc tccacaggtg tccactccca 1680

ggtccaagtt taaacagctt gcttgttctt tttgcagaag ctcagaataa acgctcaact 1740

ttggccgcca cc 1752

<210> 779
<211> 2433
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 779
tggctaataa aggaaattta ttttcattgc aatagtgtgt tggaattttt tgtgtctctc 60

actcggaaga acatatggga gggcaaatca tttaaaacat cagaatgagt atttggttta 120

gagtttggca acatatgccc atatgctggc tgccatgaac aaaggttggc tataaagagg 180

tcatcagtat atgaaacagc cccctgctgt ccattcctta ttccatagaa aagccttgac 240

ttgaggttag attttttta tattttgttt tgtgttattt ttttctttaa catccctaaa 300

attttcctta catgttttac tagccagatt tttcctcctc tcctgactac tcccagtcat 360

agctgtccct cttctcttat ggagatcata ttacccctaa cacctgccac cccagtctta 420

atcagtggtg gaagaactct cagaactgtt tgtctcaatt ggccatttaa gtttaatagt 480

gaaagactgg ttaatgataa caatgcatcg gaaaaccttc aggaggaaag gagaatgttt 540

tgtggaacat ttttgtgtgt gtggcagttt taagttatta gttttcaaaa tcagtacttt 600

ttaatggaaa caacttgacc aaaaatctgt cacagaattt tgaacccatt aaaagccgcc 660

atatactgag tcattaggga ctttccaatg ggttttgccc agtacataag gtcaataggg 720

gtgaatcaac aggaaagtcc cattggagcc aagtacactg agtcaatagg gactttccat 780

tgggttttgc ccagtacaaa aggtcaatag ggggtgagtc aatgggtttt tcccattatt 840

ggcacgtaca taaggtcaat aggggtgagt cattgggttt ttccagccaa tttataaaac 900

gccatgtggc ggggctgacg tcgggaggtg gcctccacgg gaagggacac ccggatctcg 960

acacagcctt ggcagtggag tcaggaaggg taggacagat tctggacgcc ctcttggcca 1020

gtcctcaccg ccccaccccc gatggagccg agagtaattc atacaaaagg agggatcgcc 1080

ttcgcccctg ggaatcccag ggaccgtcgc taaattctgg ccggcctccc agcccggaac 1140

cgctgtgccc gcccagcgcg gcgggaggag cctgcgccta gggcggatcg cgggtcggcg 1200

ggagagcaca agcccacagt ccccggcggt gggggagggg cgcgctgagc gggggcccgg 1260

gagccagcgc ggggcaaact gggaaagtgg tgtcgtgtgc tggctccgcc ctcttcccga 1320

gggtggggga gaacggtata aaagtgcggt agtcgcgttg gacgttcttt ttcgcaacgg 1380

gtttgccgtc agaacgcagg tgagtggcgg gtgtggcctc cgcgggcccg ggctccctcc 1440

tttgagcggg gtcggaccgc cgtgcgggtg tcgtcggccg ggcttctctg cgagcgttcc 1500

cgccctggat ggcgggctgt gcgggagggc gaggggggga ggcctggcgg cggccccgga 1560

gcctcgcctc gtgtcgggcg tgaggcctag cgtggcttcc gccccgccgc gtgccaccgc 1620

ggccgcgctt tgctgtctgc ccggctgccc tcgattgcct gcccgcggcc cgggccaaca 1680

aagggagggc gtggagctgg ctggtaggga gccccgtagt ccgcatgtcg ggcagggaga 1740

gcggcagcag tcgggggggg gaccgggccc gcccgtcccg cagcacatgt ccgacgccgc 1800

ctggacgggt agcggcctgt gtcctgataa ggcggccggg cggtgggttt tagatgccgg 1860

gttcaggtgg ccccgggtcc cggcccggtc tggccagtac cccgtagtgg cttagctccg 1920

aggagggcga gcccgcccgc ccggcaccag ttgcgtgcgc ggaaagatgg ccgctcccgg 1980

gccctgtagc aaggagctca aaatggagga cgcggcagcc cggcggagcg gggcgggtga 2040

gtcacccaca caaaggaaga gggccttgcc cctcgccggc cgctgcttcc tgtgaccccg 2100

tggtgtaccg gccgcacttc agtcaccccg ggcgctcttt cggagcaccg ctggcctccg 2160

ctgggggagg ggatctgtct aatggcgttg gagtttgctc acatttggtg ggtggagact 2220

gtagccaggc cagcctggcc atggaagtaa ttcttggaat ttgcccattt tgagtttgga 2280

gcgaagctga ttgacaaagc tgcttagccg ttcaaaggta ttcttcgaac ttttttttta 2340

aggtgttgtg aaaaccaccg ctaattcaaa tccaacagct tgcttgttct ttttgcagaa 2400

gctcagaata aacgctcaac tttggccgcc acc 2433

<210> 780
<211> 1740
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 780
atgagcagcc ggcgcttcac tgccgaagag gctctgttgc tgttcttcga ctcggacgcc 60

gaggaagaaa ttagcgagat cgaagatctg tcggatgcgg aagataacga catagacgac 120

ccggacttcc aattttcgga cgacgaagag gactcagagg atgagtccgc cgtggtgtcc 180

cctagcgacg agaacctcgg catggaacag tcctcgtcca ccgaagggac ctgggcgtcg 240

aaggatggca acatcaagtg gagcactagc ccccaccagt cccggggacg gctgtcctca 300

tccaacatca tcaagatgac ccccggaccg actcggttcg ccgtgacccg ggtggacgac 360

atccagtccg ctttccaact gttcatctca caacctattg agcggatcat cctggatatg 420

actaacttgg aaggccggag agtgttccag gagaagtgga agagtctgga ccagaccgat 480

ctcaacgcgt acattgggat cctgattctg gctggagtgt acaggtccaa gggcgaagca 540

acctcctcgc tgtggaacga agagaacgga aggcccatct tccgagccac tatgtccctg 600

gagactttcc acatgatctc acgcgtgatc agatttgaca atagggacac ccgcgtgggc 660

cggagagagt ccgataagct cgcggccatc agggacgtgt gggacaaatg ggtggaaatt 720

ctgccacttc tgtacaaccc cggtccgcac gtgaccgtcg acgaaagact ggtgccgttt 780

agaggcagat gcccattccg gcagtacatg ccgaacaagc ccgccaaata cgggattaag 840

atctgggccg cctgcgacgc caagtccagc tacgcctgga agatgcaagt ctatacggga 900

aagtcccccg gtggagcacc cgagaagaat cagggaatgc gcgtggtgct cgagatgtcc 960

gagggactgc aggggcataa catcacttgc gacaacttct tcacctcata ccggctcggg 1020

gaagaattgc agaagcggaa gctcaccatg ctcggaactg tgcggcgcaa caagcctgag 1080

cttccatccg aaatcctgaa gatccagggc agacccatgc acagctcgat cttcgcgttc 1140

acggaaaagg ccacagtggt gtcctactgc cctaagcgca acaagaacgt cctcgtgatg 1200

tccaccatgc atactgatgc cagcctgtcc acccgcgacg atatgaagcc gcagatgatt 1260

ctggactaca attccaccaa gggtggagtc gacaatctgg ataaggtcac cgccacctac 1320

tcatgccagc gcaagaccgc cagatggccg atggccattt tcttcaacat cgttgacgtg 1380

tccgcctata acgcctacgt gctttggtcc gagattaacc aagagtggaa cgccggaaag 1440

ctgtacaggc gccgcctgtt cctggaagaa ctcggcaaag cgctgatcac ccctaagatt 1500

cagcggcgcg cccgcccggc tcggagccct gcagccgcgg ccgtcattga aaagatcaag 1560

ttcaggacca gcaaccagtt tgctatggat ccggtggaca ctgatgtgaa gaagcggaaa 1620

cggtgtcaag tctgcccgtc acgcgacgac tccaagacca gcacttcgtg cgtgaagtgc 1680

aagaacttca tctgtcggaa gcacactgtg accttctgtc catcttgcgg agagcactga 1740

<210> 781
<211> 1740
<212> DNA
<213> Artificial sequence

<220>

<223> Synthetic

<400> 781
atgagctcca gaagatttac agctgaagaa gctttattac tgtttttga tagtgatgca 60

gaggaagaaa tttcagagat agaggatctt tcagatgcag aggacaatga tattgatgat 120

ccagattttc aattttccga cgatgaggag gattcagagg acgagtctgc cgttgtctct 180

ccatcggatg aaaacctggg tatggagcaa tcctcatcca cagaggggac atgggcatct 240

aaagatggta atataaaatg gtcaacatca ccacaccaaa gccgaggcag actgtcatct 300

tccaatatca tcaaaatgac acctggtcca acaagatttg ctgtcacacg agttgatgat 360

attcaatcag catttcagct cttcatatcc caaccaatag agaggattat actggacatg 420

actaacttgg aggggaggcg tgtatttcaa gagaaatgga agtcactgga tcagactgac 480

ttgaatgctt atattggaat tctgatatta gctggagtgt acagatcaaa gggagaagca 540

acttcaagtc tatggaatga agagaatgga agaccaatct ttcgagcaac aatgtctctg 600

gagacatttc atatgatatc tcgtgtgatc cgatttgaca accgtgacac cagagttggt 660

cgacgtgaaa gtgacaaact agctgcaatc agagatgtat gggataaatg ggtcgaaatt 720

ctacctttgt tgtacaatcc cggtccccat gttactgtag atgagcgcct tgttccattc 780

agagggcgct gtcctttccg acagtacatg cccaacaagc ccgccaagta tggcataaaa 840

atatgggcag cctgtgatgc aaaatctagc tatgcatgga aaatgcaagt gtacactgga 900

aaatcacctg gaggagcacc tgagaagaac caggggatgc gtgtggtgct cgaaatgagt 960

gaagggctgc aaggtcataa catcacatgt gacaacttct ttacatccta ccgccttggg 1020

gaggaacttc agaagaggaa gctgactatg ttgggaacag tcagaagaaa taagccagaa 1080

cttcccagtg aaattctcaa gatacagggg agacctatgc attcctcaat atttgctttc 1140

actgaaaaag caacagttgt ttcatactgc ccgaagagaa acaagaatgt tcttgtaatg 1200

agtacaatgc atacagatgc atctctgagc acaagagatg acatgaagcc acaaatgatc 1260

ctggactaca actccaccaa aggaggagtt gacaatctgg acaaagtcac agcaacatac 1320

agctgccagc gcaagactgc tcgttggccc atggcaattt tcttcaatat tgtggacgtg 1380

tctgcctaca atgcctatgt cctgtggtct gaaatcaacc aggaatggaa cgccggcaaa 1440

ctgtaccgac gtcggctttt cctggaggaa ctcggcaaag cactcatcac tcccaagatc 1500

cagaggcgag ccaggccagc tcgatcacca gcagctgcag ctgtcattga aaagatcaag 1560

ttcaggacat ccaaccagtt tgcaatggat ccagtggata cagatgtaaa gaaacgaaaa 1620

agatgccagg tctgtccctc ccgagatgac agtaaaacaa gtacctcttg tgtaaaatgc 1680

aagaatttca tctgcagaaa gcacacagtt acattctgtc cttcatgtgg agaacattga 1740

<210> 782
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 782

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
               325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
               405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
               485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 783
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 783

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Leu Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Gln Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ala Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Arg Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 784
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 784

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Pro Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ala Ala Tyr Asn
    450                 455                 460

Ala Tyr Ile Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Arg
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 785
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 785

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Leu Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly Arg Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Met Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 786
<211> 579
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 786

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175


Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Leu
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

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

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Ile Ile Glu Lys Ile Lys Phe Arg Thr Pro Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 787
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 787

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Thr Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Val Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 788
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 788

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Met Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

```
Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Lys Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 789
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 789

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95
```

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Arg Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Met Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Ile Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 790
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 790

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Val Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Ala Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Gln Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 791
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 791

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Lys Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Ile Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Met Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 792
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 792

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met Asp Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Met Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Arg Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 793
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 793

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Ser Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

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

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

```
Lys Lys Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 794
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 794

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125
```

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Ala Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Val Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Ile Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
530 535 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545 550 555 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 795
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 795

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Lys Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Pro Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 796
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 796

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Cys Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Val Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met Asp Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 797
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 797

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Leu Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Pro Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Tyr Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 798
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 798

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly Arg Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met Asp Thr Asp Ala Glu Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 799
<211> 579

<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 799

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145 150 155 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Ala Val Tyr Arg Ser
165 170 175

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Phe Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Lys Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 800
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 800

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Asp Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140
```

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Glu
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Val Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 801
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 801

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Val Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

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

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515   520   525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530   535   540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545   550   555   560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565   570   575

Gly Glu His

<210> 802
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 802

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1   5   10   15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20   25   30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35   40   45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50   55   60

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

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Arg Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

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

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 803
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 803

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Ile Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Ile Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met Asp Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 804
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 804

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Leu Ser
305                 310                 315                 320

Glu Gly Val Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 805
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 805

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175
```

```
Lys Arg Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly Arg Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Lys Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 806
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 806

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Trp Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Tyr Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 807
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 807

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Ala Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
               325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
               405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
               485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 808
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 808

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly Arg Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Ile Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Lys Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 809
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 809

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Arg Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Ile Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

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

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 810
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 810

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met Asp Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 811
<211> 579
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 811

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175


Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Trp Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 812
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 812

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Thr Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Ile Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Phe Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 813
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 813

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Thr Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Leu Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

```
Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Lys Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 814
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 814

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95
```

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Leu
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Arg Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 815
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 815

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 816
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 816

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Trp Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Ile Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Arg
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 817
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 817

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Ile Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Arg
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 818
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 818

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Leu Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Gln Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asn Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 819
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 819

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Trp Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Ser Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
530 535 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545 550 555 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 820
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 820

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Phe Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Pro Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 821
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 821

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Lys Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 822
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 822

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Pro Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Leu
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 823
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 823

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Phe Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Arg
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 824
<211> 579

<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 824

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

Gly Arg Arg Val Arg Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145 150 155 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
165 170 175

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ala Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Tyr Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 825
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 825

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Asp Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140
```

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly Arg Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Ser Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 826
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 826

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Arg Glu Thr Phe His Met Leu Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asn Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 827
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 827

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Ala Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Leu Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 828
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 828

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Ser Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Arg
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 829
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 829

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asp Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Ile Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Ser Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 830
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 830

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175
```

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Trp Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asn Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 831
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 831

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140
```

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Glu
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Ile Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Arg Arg Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 832
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 832

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Val Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Arg Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
               325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
               405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
               485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Lys Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 833
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 833

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Tyr Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Lys Asp Arg Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 834
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 834

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Phe Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Ile Asp Glu Arg
                245                 250                 255
```

```
Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Ile Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 835
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 835

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Glu Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asn Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 836
<211> 579
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 836

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175


Lys Arg Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Leu
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 837
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 837

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Arg Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Leu Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Leu Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 838
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 838

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asp Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

```
Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Lys Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Lys Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 839
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 839

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95
```

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asp Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Ile Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 840
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 840

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Cys Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Lys Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 841
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 841

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Glu
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Glu Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 842
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 842

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Asp Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Ile Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Lys Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 843
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 843

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Lys Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Tyr Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

```
Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 844
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 844

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125
```

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Glu
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Pro Asn Gln Phe Ala
        515                 520                 525
```

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
530 535 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545 550 555 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 845
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 845

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Glu
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Phe Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 846
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 846

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Asp Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Ile Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 847
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 847

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Thr Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Ile Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 848
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 848

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Arg Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 849
<211> 579

<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 849

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145 150 155 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Lys Ser
165 170 175

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asn Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 850
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 850

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Phe Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 851
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 851

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Arg Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Ile Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 852
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 852

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Lys Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Arg Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Ile Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 853
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 853

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Cys Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 854
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 854

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Asp Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Arg Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Leu Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 855
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 855

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175
```

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Arg Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 856
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 856

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Cys Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140
```

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 857
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 857

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ala Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 858
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 858

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Ile Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Ile Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 859
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 859

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Pro Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Lys Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 860
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 860

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Ile Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Phe Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Lys Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 861
<211> 579
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 861

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Asp Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Cys Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175


Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Leu Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 862
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 862

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Asp Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Pro Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 863
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 863

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Thr Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Ile Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

```
Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 864
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 864

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95
```

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asp Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Glu Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 865
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 865

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Phe Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Glu Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 866
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 866

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Val Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Leu Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 867
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 867

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Asp Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190
```

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Leu Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Phe Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 868
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 868

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asp Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 869
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 869

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ala Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
530 535 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545 550 555 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 870
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 870

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Gln Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Pro Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 871
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 871

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Gln Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Ile Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 872
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 872

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Arg Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 873
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 873

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Val Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Leu Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Lys Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 874
<211> 579

<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 874

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Asp Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175
```

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Arg Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 875
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 875

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Asp Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545 550 555 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 876
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 876

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Arg Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Leu
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 877
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 877

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Ile Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Ile Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Ile Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 878
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 878

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 879
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 879

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 880
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 880

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175
```

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 881
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 881

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175


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


Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205


Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220


Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240


Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255


Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270


Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285


Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300


Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320


Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335


Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 882
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 882

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
               325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
               405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
               485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 883
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 883

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 884
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 884

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Leu Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 885
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 885

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 886
<211> 579
<212> PRT
<213> Artificial sequence

<220>

<223> Synthetic

<400> 886

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175


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

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 887
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 887

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 888
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 888

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

```
Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 889
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 889

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95
```

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 890
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 890

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Leu Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255
```

```
Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Tyr Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 891
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 891

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220
```

```
Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 892
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 892

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Thr Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Leu Leu Ile Leu Ala Gly Val Tyr Lys Ser
                165                 170                 175

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

```
Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Val Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ser Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Ala Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 893
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 893

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160
```

```
Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560
```

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 894
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 894

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

```
Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525
```

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
530 535 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545 550 555 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
565 570 575

Gly Glu His

<210> 895
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 895

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

```
Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495
```

```
Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 896
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 896

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60
```

```
Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460
```

```
Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480


Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 897
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 897

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30
```

```
Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430
```

```
Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 898
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 898

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400
```

```
Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 899
<211> 579

<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 899

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145 150 155 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
165 170 175

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365
```

```
Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 900
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 900

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140
```

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335
```

```
Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 901
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 901

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300
```

```
Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 902
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 902

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270
```

```
Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495


Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510


Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525


Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540


Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 903
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 903

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45
```

```
Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240
```

```
Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445
```

```
Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 904
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 904

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15
```

```
Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205
```

```
Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Ile Ser Thr Arg Asp Asp Met Lys
                405                 410                 415
```

```
Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 905
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 905

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                  10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110


Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125


Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140


Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160


Leu Asn Ala Phe Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175
```

```
Lys Gly Glu Ala Thr Ser Ser Leu Trp Asn Glu Glu Asn Gly Arg Pro
            180                 185                 190

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380
```

```
Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575
```

Gly Glu His

<210> 906
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 906

Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1 5 10 15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
20 25 30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
35 40 45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
50 55 60

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

Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
85 90 95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
100 105 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
115 120 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
130 135 140

```
Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Leu Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350
```

```
Thr Val Arg Arg Asn Lys Pro Glu Leu Pro Ser Glu Ile Leu Lys Ile
        355                 360                 365

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540
```

```
Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560


Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575


Gly Glu His
```

<210> 907
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 907

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15


Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30


Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45


Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60


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


Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95


Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110
```

```
Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285

Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320
```

```
Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Leu Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480

Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510
```

```
Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Asp Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 908
<211> 579
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 908

```
Met Ser Ser Arg Arg Phe Thr Ala Glu Glu Ala Leu Leu Leu Phe Phe
1               5                   10                  15

Asp Ser Asp Ala Glu Glu Glu Ile Ser Glu Ile Glu Asp Leu Ser Asp
            20                  25                  30

Ala Glu Asp Asn Asp Ile Asp Asp Pro Asp Phe Gln Phe Ser Asp Asp
        35                  40                  45

Glu Glu Asp Ser Glu Asp Glu Ser Ala Val Val Ser Pro Ser Asp Glu
    50                  55                  60

Asn Leu Gly Met Glu Gln Ser Ser Ser Thr Glu Gly Thr Trp Ala Ser
65                  70                  75                  80
```

```
Lys Asp Gly Asn Ile Lys Trp Ser Thr Ser Pro His Gln Ser Arg Gly
                85                  90                  95

Arg Leu Ser Ser Ser Asn Ile Ile Lys Met Thr Pro Gly Pro Thr Arg
            100                 105                 110

Phe Ala Val Thr Arg Val Asp Asp Ile Gln Ser Ala Phe Gln Leu Phe
        115                 120                 125

Ile Ser Gln Pro Ile Glu Arg Ile Ile Leu Asp Met Thr Asn Leu Glu
    130                 135                 140

Gly Arg Arg Val Phe Gln Glu Lys Trp Lys Ser Leu Asp Gln Thr Asp
145                 150                 155                 160

Leu Asn Ala Tyr Ile Gly Ile Leu Ile Leu Ala Gly Val Tyr Arg Ser
                165                 170                 175

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

Ile Phe Arg Ala Thr Met Ser Leu Glu Thr Phe His Met Ile Ser Arg
        195                 200                 205

Val Ile Arg Phe Asp Asn Arg Asp Thr Arg Val Gly Arg Arg Glu Ser
    210                 215                 220

Asp Lys Leu Ala Ala Ile Arg Asp Val Trp Asp Lys Trp Val Glu Ile
225                 230                 235                 240

Leu Pro Leu Leu Tyr Asn Pro Gly Pro His Val Thr Val Asp Glu Arg
                245                 250                 255

Leu Val Pro Phe Arg Gly Arg Cys Pro Phe Arg Gln Tyr Met Pro Asn
            260                 265                 270

Lys Pro Ala Lys Tyr Gly Ile Lys Ile Trp Ala Ala Cys Asp Ala Lys
        275                 280                 285
```

```
Ser Ser Tyr Ala Trp Lys Met Gln Val Tyr Thr Gly Lys Ser Pro Gly
    290                 295                 300

Gly Ala Pro Glu Lys Asn Gln Gly Met Arg Val Val Leu Glu Met Ser
305                 310                 315                 320

Glu Gly Leu Gln Gly His Asn Ile Thr Cys Asp Asn Phe Phe Thr Ser
                325                 330                 335

Tyr Arg Leu Gly Glu Glu Leu Gln Lys Arg Lys Leu Thr Met Leu Gly
            340                 345                 350

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

Gln Gly Arg Pro Met His Ser Ser Ile Phe Ala Phe Thr Glu Lys Ala
    370                 375                 380

Thr Ile Val Ser Tyr Cys Pro Lys Arg Asn Lys Asn Val Leu Val Met
385                 390                 395                 400

Ser Thr Met His Thr Asp Ala Ser Leu Ser Thr Arg Asp Asp Met Lys
                405                 410                 415

Pro Gln Met Ile Leu Asp Tyr Asn Ser Thr Lys Gly Gly Val Asp Asn
            420                 425                 430

Leu Asp Lys Val Thr Ala Thr Tyr Ser Cys Gln Arg Lys Thr Ala Arg
        435                 440                 445

Trp Pro Met Ala Ile Phe Phe Asn Ile Val Asp Val Ser Ala Tyr Asn
    450                 455                 460

Ala Tyr Val Leu Trp Ser Glu Ile Asn Gln Glu Trp Asn Ala Gly Lys
465                 470                 475                 480
```

```
Leu Tyr Arg Arg Arg Leu Phe Leu Glu Glu Leu Gly Lys Ala Leu Ile
                485                 490                 495

Thr Pro Lys Ile Gln Arg Arg Ala Arg Pro Ala Arg Ser Pro Ala Ala
            500                 505                 510

Ala Arg Val Ile Glu Lys Ile Lys Phe Arg Thr Ser Asn Gln Phe Ala
        515                 520                 525

Met Asp Pro Val Asp Thr Asp Val Lys Lys Arg Lys Arg Cys Gln Val
    530                 535                 540

Cys Pro Ser Arg Asp Arg Ser Lys Thr Ser Thr Ser Cys Val Lys Cys
545                 550                 555                 560

Lys Asn Phe Ile Cys Arg Lys His Thr Val Thr Phe Cys Pro Ser Cys
                565                 570                 575

Gly Glu His
```

<210> 909
<211> 594
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic

<400> 909

```
Met Gly Ser Ser Leu Asp Asp Glu His Ile Leu Ser Ala Leu Leu Gln
1               5                   10                  15

Ser Asp Asp Glu Leu Val Gly Glu Asp Ser Asp Ser Glu Val Ser Asp
            20                  25                  30

His Val Ser Glu Asp Asp Val Gln Ser Asp Thr Glu Glu Ala Phe Ile
        35                  40                  45
```

```
Asp Glu Val His Glu Val Gln Pro Thr Ser Ser Gly Ser Glu Ile Leu
    50                  55                  60

Asp Glu Gln Asn Val Ile Glu Gln Pro Gly Ser Ser Leu Ala Ser Asn
65                  70                  75                  80

Arg Ile Leu Thr Leu Pro Gln Arg Thr Ile Arg Gly Lys Asn Lys His
                85                  90                  95

Cys Trp Ser Thr Ser Lys Ser Thr Arg Arg Ser Arg Val Ser Ala Leu
            100                 105                 110

Asn Ile Val Arg Ser Gln Arg Gly Pro Thr Arg Met Cys Arg Asn Ile
        115                 120                 125

Tyr Asp Pro Leu Leu Cys Phe Lys Leu Phe Phe Thr Asp Glu Ile Ile
    130                 135                 140

Ser Glu Ile Val Lys Trp Thr Asn Ala Glu Ile Ser Leu Lys Arg Arg
145                 150                 155                 160

Glu Ser Met Thr Ser Ala Thr Phe Arg Asp Thr Asn Glu Asp Glu Ile
                165                 170                 175

Tyr Ala Phe Phe Gly Ile Leu Val Met Thr Ala Val Arg Lys Asp Asn
            180                 185                 190

His Met Ser Thr Asp Asp Leu Phe Asp Arg Ser Leu Ser Met Val Tyr
        195                 200                 205

Val Ser Val Met Ser Arg Asp Arg Phe Asp Phe Leu Ile Arg Cys Leu
    210                 215                 220

Arg Met Asp Asp Lys Ser Ile Arg Pro Thr Leu Arg Glu Asn Asp Val
225                 230                 235                 240

Phe Thr Pro Val Arg Lys Ile Trp Asp Leu Phe Ile His Gln Cys Ile
                245                 250                 255
```

```
Gln Asn Tyr Thr Pro Gly Ala His Leu Thr Ile Asp Glu Gln Leu Leu
            260                 265                 270

Gly Phe Arg Gly Arg Cys Pro Phe Arg Val Tyr Ile Pro Asn Lys Pro
        275                 280                 285

Ser Lys Tyr Gly Ile Lys Ile Leu Met Met Cys Asp Ser Gly Thr Lys
    290                 295                 300

Tyr Met Ile Asn Gly Met Pro Tyr Leu Gly Arg Gly Thr Gln Thr Asn
305                 310                 315                 320

Gly Val Pro Leu Gly Glu Tyr Tyr Val Lys Glu Leu Ser Lys Pro Val
                325                 330                 335

His Gly Ser Cys Arg Asn Ile Thr Cys Asp Asn Trp Phe Thr Ser Ile
            340                 345                 350

Pro Leu Ala Lys Asn Leu Leu Gln Glu Pro Tyr Lys Leu Thr Ile Val
        355                 360                 365

Gly Thr Val Arg Ser Asn Lys Arg Glu Ile Pro Glu Val Leu Lys Asn
    370                 375                 380

Ser Arg Ser Arg Pro Val Gly Thr Ser Met Phe Cys Phe Asp Gly Pro
385                 390                 395                 400

Leu Thr Leu Val Ser Tyr Lys Pro Lys Pro Ala Lys Met Val Tyr Leu
                405                 410                 415

Leu Ser Ser Cys Asp Glu Asp Ala Ser Ile Asn Glu Ser Thr Gly Lys
            420                 425                 430

Pro Gln Met Val Met Tyr Tyr Asn Gln Thr Lys Gly Gly Val Asp Thr
        435                 440                 445
```

```
Leu Asp Gln Met Cys Ser Val Met Thr Cys Ser Arg Lys Thr Asn Arg
    450                 455                 460

Trp Pro Met Ala Leu Leu Tyr Gly Met Ile Asn Ile Ala Cys Ile Asn
465                 470                 475                 480

Ser Phe Ile Ile Tyr Ser His Asn Val Ser Ser Lys Gly Glu Lys Val
                485                 490                 495

Gln Ser Arg Lys Lys Phe Met Arg Asn Leu Tyr Met Ser Leu Thr Ser
            500                 505                 510

Ser Phe Met Arg Lys Arg Leu Glu Ala Pro Thr Leu Lys Arg Tyr Leu
        515                 520                 525

Arg Asp Asn Ile Ser Asn Ile Leu Pro Lys Glu Val Pro Gly Thr Ser
    530                 535                 540

Asp Asp Ser Thr Glu Glu Pro Val Met Lys Lys Arg Thr Tyr Cys Thr
545                 550                 555                 560

Tyr Cys Pro Ser Lys Ile Arg Arg Lys Ala Asn Ala Ser Cys Lys Lys
                565                 570                 575

Cys Lys Lys Val Ile Cys Arg Glu His Asn Ile Asp Met Cys Gln Ser
            580                 585                 590

Cys Phe
```