SEQUENCE LISTING

<110> VISTERRA, INC.

<120> INTERLEUKIN-2 AGENTS AND USES THEREOF

<130> P2029-7028WO

<140>
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<150> 62/983,061
<151> 2020-02-28

<150> 62/879,137
<151> 2019-07-26

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<170> PatentIn version 3.5

<210> 1
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<220>
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<400> 1
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

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Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr
    130


<210> 2
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<220>
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<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
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        115                 120                 125


Ile Ser Thr Leu Thr
    130


<210> 3
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 3
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr
    130
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<210> 4
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<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

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<211> 133
<212> PRT
<213> Artificial Sequence

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

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 6
<211> 133
<212> PRT
<213> Artificial Sequence

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

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 7
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 7
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 8
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 8
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu

65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

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<211> 133
<212> PRT
<213> Artificial Sequence

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

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1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

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<211> 133
<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

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<211> 133
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<213> Artificial Sequence

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

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 12
<211> 133

<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic
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<400> 12
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 13
<211> 133
<212> PRT
<213> Artificial Sequence

<220>
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<223> /note="Description of Artificial Sequence: Synthetic
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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 14
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 14
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys

```
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr
    130


<210> 15
<211> 133
<212> PRT
<213> Artificial Sequence

<220>
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      polypeptide"

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
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```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr
    130
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<210> 16
<211> 133
<212> PRT
<213> Artificial Sequence

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

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
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Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 17
<211> 133
<212> PRT
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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 17
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1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

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Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr
    130


<210> 18
<211> 133
<212> PRT
<213> Artificial Sequence

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

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr
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130

<210> 19
<211> 133
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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 19
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

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<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 20
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 21
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 21

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr
    130
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<210> 22
<211> 133
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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 22

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
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Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 23
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 23
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 24
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 24
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu

85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 25
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 25
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 26
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 26
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 27
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 27
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 28
<211> 133
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 28
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 29
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 29
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr
    130
```

<210> 30
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 30

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
```

35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 31
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 31
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 32
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 32
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 33
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 33
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 34
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 34
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 35

<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 35
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 36
<211> 133
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 36
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 37
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 37
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 38
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 38
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 39
<211> 227
<212> PRT
<213> Homo sapiens

<400> 39
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
20 25 30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
35 40 45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
50 55 60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65 70 75 80

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
85 90 95

```
Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
            100                 105                 110

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

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130                 135                 140

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

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165                 170                 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180                 185                 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195                 200                 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
    210                 215                 220

Pro Gly Lys
225
```

<210> 40
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 40

```
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1               5                   10                  15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
            20                  25                  30
```

```
Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
        35                  40                  45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
    50                  55                  60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Gly Ser Thr Tyr
65                  70                  75                  80

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
                85                  90                  95

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
            100                 105                 110

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

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130                 135                 140

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

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165                 170                 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180                 185                 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195                 200                 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
    210                 215                 220

Pro Gly Lys
225
```

<210> 41
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 41
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
20 25 30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
35 40 45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
50 55 60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65 70 75 80

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
85 90 95

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Gly Ala Pro Ile
100 105 110

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

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
130 135 140

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

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
195 200 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
210 215 220

Pro Gly Lys
225

<210> 42
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 42
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
20 25 30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
35 40 45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
50 55 60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Gly Ser Thr Tyr
65 70 75 80

Arg Val Val Ser Val Leu Gln Val Leu His Val Asp Trp Leu Asn Gly
85 90 95

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
100 105 110

```
Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
        115                 120                 125

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130                 135                 140

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu
145                 150                 155                 160

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165                 170                 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180                 185                 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195                 200                 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
    210                 215                 220

Pro Gly Lys
225
```

<210> 43
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 43

```
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1               5                   10                  15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
            20                  25                  30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
```

35 40 45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
50 55 60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65 70 75 80

Arg Val Val Ser Val Leu Gln Val Leu His Val Asp Trp Leu Asn Gly
85 90 95

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Gly Ala Pro Ile
100 105 110

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

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
130 135 140

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu
145 150 155 160

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
195 200 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
210 215 220

Pro Gly Lys
225

<210> 44
<211> 229
<212> PRT

<213> Artificial Sequence

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

<400> 44

```
Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1               5                  10                  15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
            20                  25                  30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
        35                  40                  45

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

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65                  70                  75                  80

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
                85                  90                  95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
            100                 105                 110

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

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
    130                 135                 140

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

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                165                 170                 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
            180                 185                 190
```

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
195 200 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
210 215 220

Leu Ser Leu Gly Lys
225

<210> 45
<211> 229
<212> PRT
<213> Artificial Sequence

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

<400> 45
Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1 5 10 15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
20 25 30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
35 40 45

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

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65 70 75 80

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
85 90 95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
100 105 110

Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro

```
        115                 120                 125

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
    130                 135                 140

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

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                165                 170                 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
            180                 185                 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
        195                 200                 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
    210                 215                 220

Leu Ser Leu Gly Lys
225
```

<210> 46
<211> 229
<212> PRT
<213> Artificial Sequence

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

<400> 46

```
Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1               5                   10                  15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
            20                  25                  30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
        35                  40                  45
```

```
Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
    50                  55                  60

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65                  70                  75                  80

Thr Tyr Arg Val Val Ser Val Leu Gln Val Leu His Val Asp Trp Leu
                85                  90                  95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
            100                 105                 110

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

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
    130                 135                 140

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Val
145                 150                 155                 160

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                165                 170                 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
            180                 185                 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
        195                 200                 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
    210                 215                 220

Leu Ser Leu Gly Lys
225
```

<210> 47
<211> 229
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 47

```
Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1               5                  10                  15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
            20                  25                  30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
        35                  40                  45

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

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65                  70                  75                  80

Thr Tyr Arg Val Val Ser Val Leu Gln Val Leu His Val Asp Trp Leu
                85                  90                  95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
            100                 105                 110

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

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
    130                 135                 140

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Val
145                 150                 155                 160

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                165                 170                 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
            180                 185                 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
```

195 200 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
210 215 220

Leu Ser Leu Gly Lys
225

<210> 48
<211> 20
<212> PRT
<213> Artificial Sequence

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

<400> 48
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 49
<211> 36
<212> PRT
<213> Artificial Sequence

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

<400> 49
Ala Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Pro Val Pro Ser
1 5 10 15

Thr Pro Pro Thr Asn Ser Ser Ser Thr Pro Pro Thr Pro Ser Pro Ser
20 25 30

Ala Ser Gly Ser
35

<210> 50

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

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

<400> 50
Ala Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Pro Val Pro Ser
1 5 10 15

Thr Pro Pro Thr Pro Ser Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser
20 25 30

Gly Gly Ser Gly Asn Ser Ser Gly Ser Gly Gly Ser
35 40

<210> 51
<211> 48
<212> PRT
<213> Artificial Sequence

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

<400> 51
Ala Gly Ser Gly Asn Ser Ser Gly Ser Gly Gly Ser Gly Gly Ser Gly
1 5 10 15

Asn Ser Ser Gly Ser Gly Gly Ser Pro Val Pro Ser Thr Pro Pro Thr
20 25 30

Pro Ser Pro Ser Thr Pro Pro Thr Pro Ser Pro Ser Ala Ser Gly Ser
35 40 45

<210> 52
<211> 24
<212> PRT
<213> Artificial Sequence

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

<400> 52
Ala Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys
1 5 10 15

Glu Ala Ala Ala Lys Ala Gly Ser
20

<210> 53
<211> 25
<212> PRT
<213> Artificial Sequence

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

<400> 53
Gly Thr Thr Pro Asn Pro Pro Ala Ser Ser Ser Thr Thr Gly Ser Ser
1 5 10 15

Thr Pro Thr Asn Pro Pro Ala Gly Ser
20 25

<210> 54
<211> 37
<212> PRT
<213> Artificial Sequence

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

<400> 54
Ala Gly Ser Pro Gly Ala Gly Asn Gly Gly Asn Asn Gly Gly Asn Pro
1 5 10 15

Pro Pro Pro Thr Thr Thr Thr Ser Ser Ala Pro Ala Thr Thr Thr Thr
20 25 30

Ala Ser Ala Gly Ser
35

<210> 55
<211> 22

<212> PRT
<213> Artificial Sequence

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

<400> 55
Gly Gly Gly Ser Ala Gly Gly Gly Ser Ala Gly Gly Gly Ser Ala Gly
1 5 10 15

Gly Gly Ser Ala Gly Ser
20

<210> 56
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 56
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 57
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 57
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
```

325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 58
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 58
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 59
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 59
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile

```
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 60
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 60
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

```
Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 61
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 61
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
```

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
```

```
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 62
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 62

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
```

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

```
Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 63
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 63
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
```

```
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 64
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 64
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 65
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 65
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
```

355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 66
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 66
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

```
Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 67
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 67
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
```

```
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 68
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 68
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 69
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 69
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
```

370 375 380

<210> 70
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 70
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 71
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 71
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe

```
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 72
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 72
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 73
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 73
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 74

<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 74
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 75
<211> 380

<212> PRT
<213> Artificial Sequence

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

<400> 75
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val

```
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 76
<211> 380
<212> PRT

<213> Artificial Sequence

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

<400> 76
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 77
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 77
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 78
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 78
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 79
<211> 380
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 79
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe

195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
210 215 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225 230 235 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 80
<211> 380
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 80

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 81
<211> 380
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 81

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 82
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 82
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 83
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 83
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro

```
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 84
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 84
```

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 85
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 85
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
```

```
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 86
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 86

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 87
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 87

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
```

225 230 235 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 88
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 88
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240
```

```
Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 89
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 89

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
```

```
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240
```

```
Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 90
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 90

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240
```

```
Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 91
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 91
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
```

```
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 92
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 92
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 93
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 93

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
```

```
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 94
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 94

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 95
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 95

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
```

260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 96
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 96
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 97
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 97

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
```

```
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 98
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 98

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 99
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 99

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
```

275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 100
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 100
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285
```

```
Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 101
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 101

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
```

65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
210 215 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225 230 235 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

```
Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 102
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 102

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285
```

```
Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 103
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 103

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
```

```
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 104
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 104
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300
```

```
Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 105
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 105
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
```

```
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300
```

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 106
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 106
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300
```

```
Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 107
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 107

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
```

305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 108
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 108
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 109
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 109
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala

```
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 110
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 110
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 111
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 111
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
```

325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 112
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 112
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

```
Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 113
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 113
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
```

```
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

```
Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 114
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 114
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
```

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 115
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 115
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
```

340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 116
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 116
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

```
Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 117
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 117
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
```

```
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 118
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 118
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 119
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 119
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
```

355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 120
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 120
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

```
Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 121
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 121
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
```

```
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 122
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 122
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 123
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 123
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
```

370 375 380

<210> 124
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 124
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 125
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 125
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe

```
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 126
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 126
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 127
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 127
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 128

<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 128
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 129
<211> 380

<212> PRT
<213> Artificial Sequence

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

<400> 129
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val

```
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 130
<211> 380
<212> PRT

<213> Artificial Sequence

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

<400> 130
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 131
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 131
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 132
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 132
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 133
<211> 380
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 133
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe

```
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 134
<211> 380
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 134

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 135
<211> 380
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 135

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 136
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 136
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 137
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 137
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro

```
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 138
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 138
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```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 139
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 139
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
```

```
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 140
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 140
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 141
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 141
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
```

225 230 235 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 142
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 142
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240
```

```
Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 143
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 143
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
```

```
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240
```

```
Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 144
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 144
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240
```

```
Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255


Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270


Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285


Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300


Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 145
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 145
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
```

```
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 146
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 146
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 147
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 147

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
```

```
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 148
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 148
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 149
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 149
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
```

260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 150
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 150
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 151
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 151
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
```

```
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 152
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 152
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 153
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 153
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
```

275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 154
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 154
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285
```

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 155
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 155
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu

65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
210 215 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225 230 235 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

```
Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 156
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 156

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285
```

```
Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 157
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 157

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
```

```
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 158
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 158
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300
```

```
Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 159
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 159
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
```

```
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300
```

```
Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 160
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 160
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300
```

```
Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 161
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 161
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
```

305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 162
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 162
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

```
Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 163
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 163

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
```

```
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 164
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 164
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320
```

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 165
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 165
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
```

```
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 166
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 166

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110
```

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

```
Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 167
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 167
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
```

```
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 168
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 168
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
```

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 169
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 169
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
```

340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 170
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 170
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

```
Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 171
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 171
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
```

```
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

```
Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 172
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 172
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140
```

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
```

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 173
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 173
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
```

355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 174
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 174
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 175
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 175
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro

145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
210 215 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225 230 235 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 176
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 176
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365
```

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 177
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 177
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
```

370 375 380

<210> 178
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 178
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

```
Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 179
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 179
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe

```
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 180
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 180
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 181
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 181
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 182

<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 182
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

```
Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 183
<211> 380

<212> PRT
<213> Artificial Sequence

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

<400> 183
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val

```
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 184
<211> 380
<212> PRT

<213> Artificial Sequence

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

<400> 184
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 185
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 185
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 186
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 186
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

```
Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 187
<211> 380
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 187
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe

```
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 188
<211> 380
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 188

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 189
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 189

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205
```

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 190
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 190
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

```
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 191
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 191
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145 150 155 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
165 170 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
180 185 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
195 200 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro

```
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 192
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 192
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```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 193
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 193
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
```

```
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240


Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255


Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270


Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285


Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300


Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320


Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335


Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 194
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 194
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220
```

```
Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 195
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 195
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
```

225 230 235 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
245 250 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
260 265 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
275 280 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
290 295 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305 310 315 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
325 330 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 196
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 196
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240
```

```
Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 197
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 197

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
```

```
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240
```

```
Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 198
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 198
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240
```

```
Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 199
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 199

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
```

```
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 200
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 200
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 201
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 201

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
```

```
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 202
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 202
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255
```

```
Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 203
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 203

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
```

```
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 204
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 204

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
```

<210> 205
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 205

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
```

```
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 206
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 206
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270
```

```
Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 207
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 207
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Gln
225                 230                 235                 240

Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
```

```
        275                 280                 285

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 208
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 208
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 209
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 209
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
```

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65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 210
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 210
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 211
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 211
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
```

290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 212
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 212
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 213
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 213
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu

```
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 214
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 214
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

```
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 215
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 215

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
```

305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 216
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 216
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

```
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 217
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 217

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
```

```
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 218
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 218
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 219
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 219
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
```

325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 220
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 220
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

```
Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350


Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 221
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 221
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
```

```
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 222
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 222
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 223
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 223
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
```

```
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 224
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 224

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
```

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

```
Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 225
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 225
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
```

```
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

```
Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 226
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 226
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140
```

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 227
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 227
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
```

355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 228
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 228
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

```
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 229
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 229
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
```

```
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

```
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 230
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 230
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160
```

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 231
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 231
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
```

370 375 380

<210> 232
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 232
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 233
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 233
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe

```
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 234
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 234
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1   5   10   15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20   25   30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35   40   45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50   55   60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65   70   75   80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85   90   95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100   105   110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115   120   125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130   135   140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145   150   155   160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165   170   175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 235
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 235
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 236

<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 236
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 237
<211> 382

<212> PRT
<213> Artificial Sequence

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

<400> 237
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro

```
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380

<210> 238
<211> 382
<212> PRT
```

<213> Artificial Sequence

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

<400> 238

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160


Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175


Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190
```

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 239
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 239

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190
```

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 240
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 240
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 241
<211> 382
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 241
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val

```
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 242
<211> 382
<212> PRT
<213> Artificial Sequence

<220>
<221> source
```

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

<400> 242

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205
```

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 243
<211> 382
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 243
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 244
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 244
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 245
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 245
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr

```
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 246
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 246
```

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 247
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 247

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
```

```
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 248
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 248
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 249
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 249
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
```

225 230 235 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
245 250 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 250
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 250
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 251
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 251
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
```

```
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 252
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 252
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 253
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 253
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
```

```
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 254
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 254
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255
```

```
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 255
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 255
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
```

```
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255
```

```
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 256
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 256
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255
```

```
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 257
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 257

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
```

260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 258
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 258
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270
```

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 259
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 259
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys

```
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270
```

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 260
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 260
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270
```

```
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 261
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 261

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
```

275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 262
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 262
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 263
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 263
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
```

```
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 264
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 264
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 265
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 265
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
```

```
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 266
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 266
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

```
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 267
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 267
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
```

```
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

```
Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 268
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 268

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 269
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 269
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
```

305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 270
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 270
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 271
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 271
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala

```
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 272
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 272
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

```
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 273
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 273

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110
```

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
```

325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 274
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 274
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

```
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350


Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 275
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 275
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
```

```
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 276
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 276
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 277
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 277
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
```

```
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 278
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 278

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
```

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

```
Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 279
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 279
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
```

```
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 280
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 280
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 281
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 281
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
```

355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 282
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 282
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

```
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 283
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 283
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
```

145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
210 215 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225 230 235 240

Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
245 250 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

```
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 284
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 284
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160
```

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 285
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 285
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
```

370 375 380

<210> 286
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 286
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 287
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 287
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe

```
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 288
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 288
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 289
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 289
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 290

<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 290
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 291
<211> 382

<212> PRT
<213> Artificial Sequence

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

<400> 291
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro

```
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380

<210> 292
<211> 382
<212> PRT
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<213> Artificial Sequence

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

<400> 292

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160


Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175


Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190
```

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 293
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 293
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 294
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 294
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 295
<211> 382
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 295
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val

```
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 296
<211> 382
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 296

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205
```

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 297
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 297

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205
```

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 298
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 298
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 299
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 299
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr

```
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 300
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 300
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```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 301
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 301
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
```

```
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225 230 235 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
245 250 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 302
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 302
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 303
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 303
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
```

225 230 235 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
245 250 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 304
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 304
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 305
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 305
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
```

```
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 306
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 306
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 307
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 307

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
```

```
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 308
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 308
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30
```

```
Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255
```

```
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 309
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 309

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
```

```
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255
```

```
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 310
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 310
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255
```

```
Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 311
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 311

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
        35                  40                  45
```

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
```

260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 312
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 312
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270
```

```
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 313
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 313

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
```

```
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270
```

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 314
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 314
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270
```

```
Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 315
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 315

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60
```

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
```

275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 316
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 316
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

```
Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 317
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 317

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
```

```
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 318
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 318
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285
```

```
Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 319
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 319
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80
```

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
```

290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 320
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 320
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

```
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 321
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 321
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu

```
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

```
Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320


Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335


Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350


Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 322
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 322
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300
```

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 323
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 323
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
```

305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 324
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 324
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asp
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

```
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 325
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 325
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala

```
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

```
Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 326
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 326

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110
```

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320
```

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 327
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 327
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Thr Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
```

325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 328
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 328
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

```
Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350


Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 329
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 329
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
```

```
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 330
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 330
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Leu Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335
```

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 331
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 331
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Ser Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
```

```
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 332
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 332

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
```

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

```
Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365


Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 333
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 333
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
```

```
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 334
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 334
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350
```

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 335
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 335
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
```

```
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 336
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 336
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140
```

```
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

```
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 337
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 337
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Glu Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
```

145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
210 215 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225 230 235 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
245 250 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

```
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 338
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 338
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140


Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160
```

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365
```

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 339
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 339
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
```

370 375 380

<210> 340
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 340
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

```
Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 341
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 341
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe

```
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 342
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 342
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Gln Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 343
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 343
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 344

<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 344
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

```
Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 345
<211> 382

<212> PRT
<213> Artificial Sequence

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

<400> 345
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro

```
            180                 185                 190

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380

<210> 346
<211> 382
<212> PRT
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<213> Artificial Sequence

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

<400> 346
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 347
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 347
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 348
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 348
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

```
Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 349
<211> 382
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 349
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Lys Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val

```
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 350
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 350

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205
```

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 351
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 351

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe Ala Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Gly Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asp Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205
```

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 352
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 352
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

```
Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 353
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 353
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145 150 155 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
165 170 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
195 200 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr

```
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380
```

<210> 354
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 354

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                  10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Val Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 355
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 355
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
```

```
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Arg Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 356
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 356
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Glu Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220
```

```
Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 357
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 357
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15
```

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
```

225 230 235 240

Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
245 250 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
260 265 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
275 280 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
290 295 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305 310 315 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
325 330 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
340 345 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
355 360 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
370 375 380

<210> 358
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 358
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

```
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Gln Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 359
<211> 382
<212> PRT
<213> Artificial Sequence

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

<400> 359
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
```

```
            20                  25                  30

Asn Pro Glu Leu Thr Asn Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser Lys Tyr Gly Pro Pro
145                 150                 155                 160

Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe
                165                 170                 175

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

Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val
        195                 200                 205

Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
    210                 215                 220

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val
225                 230                 235                 240
```

```
Leu Gln Val Leu His Val Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
                245                 250                 255

Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser
            260                 265                 270

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
        275                 280                 285

Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
    290                 295                 300

Lys Gly Phe Tyr Pro Ser Asp Ile Val Val Glu Trp Glu Ser Asn Gly
305                 310                 315                 320

Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
                325                 330                 335

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
            340                 345                 350

Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
        355                 360                 365

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
    370                 375                 380


<210> 360
<211> 153
<212> PRT
<213> Homo sapiens

<400> 360
Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu
1               5                   10                  15

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

Gln Leu Glu His Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile
        35                  40                  45
```

Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe
50 55 60

Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu
65 70 75 80

Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys
85 90 95

Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile
100 105 110

Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala
115 120 125

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

Cys Gln Ser Ile Ile Ser Thr Leu Thr
145 150

<210> 361
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 361
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 362
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 362
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 363
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 363
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgaggatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 364

<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 364
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 365
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 365
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 366
<211> 399
<212> DNA

<213> Artificial Sequence

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

<400> 366
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aaccaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 367
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 367
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 368
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 368
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 369
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 369
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cctgatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 370
<211> 399
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 370
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cagcatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 371
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 371
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 372
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 372
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 373
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 373
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 374
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 374

gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 375
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 375
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 376
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 376
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 377
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 377
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 378
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 378
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 379
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 379
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 380
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 380
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 381
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 381
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 382
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 382
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 383
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 383
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 384
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 384
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 385
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 385
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 386
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 386
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 387
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 387
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 388
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 388
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 389
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 389
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 390
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 390
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 391

<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 391
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 392
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 392
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 393
<211> 399
<212> DNA

<213> Artificial Sequence

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

<400> 393
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 394
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 394
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 395
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 395
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 396
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 396
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 397
<211> 399
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 397
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 398
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 398
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 399
<211> 681
<212> DNA
<213> Homo sapiens

<400> 399
gataaaactc atacgtgccc accctgcccc gcaccggagc tgcttggggg tccttccgta 60

ttcttgtttc cgccgaagcc gaaggacacg cttatgatta gcaggactcc cgaagtgacg 120

tgcgtcgtag tggacgtgtc gcatgaggac ccggaggtca agttcaactg gtatgtcgat 180

ggcgtagaag tacacaatgc aaagactaaa ccccgcgaag aacagtacaa ttcgacatac 240

agagtagtga gcgtcttgac tgtgctgcac caggactggc tcaacggaaa ggagtataag 300

tgtaaagtat cgaataaggc acttcccgca cctatcgaga aaacgatctc caaggctaag 360

ggtcagccaa gagaacccca agtctacact ctgccccta gccgcgacga gcttacgaaa 420

aaccaggtgt cgctcacttg tttggtgaag ggtttctatc cgagcgatat tgcggtagag 480

tgggaatcca acgggcagcc agagaacaat tacaagacga cgccaccagt gctggattcg 540

gatgggagct ttttcttgta ctcaaagttg accgtggata aaagccggtg gcagcagggt 600

aatgtgtttt catgctcggt aatgcacgag gccctccata accattatac gcagaaaagc 660

ctttcgctct cacccgggaa a 681

<210> 400
<211> 681
<212> DNA
<213> Artificial Sequence

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

<400> 400
gataaaactc atacgtgccc accctgcccc gcaccggagc tgcttggggg tccttccgta 60

ttcttgtttc cgccgaagcc gaaggacacg cttatgatta gcaggactcc cgaagtgacg 120

tgcgtcgtag tggacgtgtc gcatgaggac ccggaggtca agttcaactg gtatgtcgat 180

ggcgtagaag tacacaatgc aaagactaaa ccccgcgaag aacagtacgg ttcgacatac 240

agagtagtga gcgtcttgac tgtgctgcac caggactggc tcaacggaaa ggagtataag 300

tgtaaagtat cgaataaggc acttcccgca cctatcgaga aaacgatctc caaggctaag 360

ggtcagccaa gagaacccca agtctacact ctgccccta gccgcgacga gcttacgaaa 420

aaccaggtgt cgctcacttg tttggtgaag ggtttctatc cgagcgatat tgcggtagag 480

tgggaatcca acgggcagcc agagaacaat tacaagacga cgccaccagt gctggattcg 540

gatgggagct ttttcttgta ctcaaagttg accgtggata aaagccggtg gcagcagggt 600

aatgtgtttt catgctcggt aatgcacgag gccctccata accattatac gcagaaaagc 660

ctttcgctct cacccgggaa a 681

<210> 401
<211> 681
<212> DNA
<213> Artificial Sequence

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

<400> 401
gataaaactc atacgtgccc accctgcccc gcaccggagg cagcaggggg tccttccgta 60

ttcttgtttc cgccgaagcc gaaggacacg cttatgatta gcaggactcc cgaagtgacg 120

tgcgtcgtag tcgacgtgtc gcatgaggac ccggaggtca agttcaactg gtatgtcgat 180

ggcgtagaag tacacaatgc aaagactaaa ccccgcgaag aacagtacaa ttcgacatac 240

agagtagtga gcgtcttgac tgtgctgcac caggactggc tcaacggaaa ggagtataag 300

tgtaaagtat cgaataaggc acttggtgca cctatcgaga aaacgatctc caaggctaag 360

ggtcagccaa gagaacccca agtctacact ctgccccta gccgcgacga gcttacgaaa 420

aaccaggtgt cgctcacttg tttggtgaag ggtttctatc cgagcgatat tgcggtagag 480

tgggaatcca acgggcagcc agagaacaat tacaagacga cgccaccagt gctggattcg 540

gatgggagct ttttcttgta ctcaaagttg accgtggata aaagccggtg gcagcagggt 600

aatgtgtttt catgctcggt aatgcacgag gccctccata accattatac gcagaaaagc 660

ctttcgctct cacccgggaa a 681

<210> 402
<211> 681
<212> DNA
<213> Artificial Sequence

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

<400> 402
gataaaactc atacgtgccc accctgcccc gcaccggagc tgcttggggg tccttccgta 60

ttcttgtttc cgccgaagcc gaaggacacg cttatgatta gcaggactcc cgaagtgacg 120

tgcgtcgtag tcgacgtgtc gcatgaggac ccggaggtca agttcaactg gtatgtcgat 180

ggcgtagaag tacacaatgc aaagactaaa ccccgcgaag aacagtacgg ttcgacatac 240

agagtagtga gcgtcttgca ggtgctgcac gttgactggc tcaacggaaa ggagtataag 300

tgtaaagtat cgaataaggc acttcccgca cctatcgaga aaacgatctc caaggctaag 360

ggtcagccaa gagaacccca agtctacact ctgccccta gccgcgacga gcttacgaaa 420

aaccaggtgt cgctcacttg tttggtgaag ggtttctatc cgagcgatat tgtggtagag 480

tgggaatcca acgggcagcc agagaacaat tacaagacga cgccaccagt gctggattcg 540

gatgggagct ttttcttgta ctcaaagttg accgtggata aaagccggtg gcagcagggt 600

aatgtgtttt catgctcggt aatgcacgag gccctccata accattatac gcagaaaagc 660

ctttcgctct cacccgggaa a 681

<210> 403
<211> 681
<212> DNA
<213> Artificial Sequence

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

<400> 403
gataaaactc atacgtgccc accctgcccc gcaccggagg cagcaggtgg tccttccgta 60

ttcttgtttc cgccgaagcc gaaggacacg cttatgatta gcaggactcc cgaagtgacg 120

tgcgtcgtag tcgacgtgtc gcatgaggac ccggaggtca agttcaactg gtatgtcgat 180

ggcgtagaag tacacaatgc aaagactaaa ccccgcgaag aacagtacaa ttcgacatac 240

agagtagtga gcgtcttgca ggtgctgcac gttgactggc tcaacggaaa ggagtataag 300

tgtaaagtat cgaataaggc acttggtgca cctatcgaga aaacgatctc caaggctaag 360

ggtcagccaa gagaacccca agtctacact ctgccccta gccgcgacga gcttacgaaa 420

aaccaggtgt cgctcacttg tttggtgaag ggtttctatc cgagcgatat tgtggtagag 480

tgggaatcca acgggcagcc agagaacaat tacaagacga cgccaccagt gctggattcg 540

gatgggagct ttttcttgta ctcaaagttg accgtggata aaagccggtg gcagcagggt 600

aatgtgtttt catgctcggt aatgcacgag gccctccata accattatac gcagaaaagc 660

ctttcgctct cacccgggaa a 681

<210> 404
<211> 687
<212> DNA
<213> Artificial Sequence

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

<400> 404
gaaagtaagt atggccctcc ttgccctccg tgccctgcac ctgagttcct cggcggtcct 60

tcagtgtttt tgtttccacc caaacctaaa gacaccctta tgatctctcg aacacctgaa 120

gtaacctgtg tagttgttga tgtctcacag gaagatccgg aggttcaatt taattggtac 180

gtcgatggtg ttgaagtgca taatgcgaag actaagccga gagaggaaca gttcaattcc 240

acttatcgcg tggtttcagt ccttacagtc ttgcaccaag attggcttaa cggaaaggaa 300

tataagtgca aggtaagtaa taaagggctt ccatcaagca ttgaaaaaac cataagtaaa 360

gcaaaaggac aaccgaggga gccccaagtc tacacgcttc ctccttctca ggaggagatg 420

accaaaaacc aggtaagttt gacgtgtttg gtaaaggggt tttatccctc agatattgct 480

gtcgaatggg agtctaatgg tcagcctgag aacaattaca agactacgcc acccgttctg 540

gattcagacg gatctttctt cctctacagc agattgacgg tagacaaaag ccgctggcaa 600

gagggcaatg tcttcagttg ttctgtaatg cacgaagccc tccataatca ctacacgcag 660

aaatctctga gcttgtctct tgggaaa 687

<210> 405
<211> 687
<212> DNA
<213> Artificial Sequence

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

<400> 405
gaaagtaagt atggccctcc ttgccctccg tgccctgcac ctgagttcct cggcggtcct 60

tcagtgtttt tgtttccacc caaacctaaa gacaccctta tgatctctcg aacacctgaa 120

gtaacctgtg tagttgttga tgtctcacag gaagatccgg aggttcaatt taattggtac 180

gtcgatggtg ttgaagtgca taatgcgaag actaagccga gagaggaaca gttcaattcc 240

acttatcgcg tggtttcagt ccttacagtc ttgcaccaag attggcttaa cggaaaggaa 300

tataagtgca aggtaagtaa taaagggctt ccatcaagca ttgaaaaaac cataagtaaa 360

gcaaaaggac aaccgaggga gccccaagtc tacacgcttc ctccttctca ggaggagatg 420

accaaaaacc aggtaagttt gacgtgtttg gtaaaggggt tttatccctc agatattgct 480

gtcgaatggg agtctaatgg tcagcctgag aacaattaca agactacgcc acccgttctg 540

gattcagacg gatctttctt cctctacagc aaattgacgg tagacaaaag ccgctggcaa 600

gagggcaatg tcttcagttg ttctgtaatg cacgaagccc tccataatca ctacacgcag 660

aaatctctga gcttgtctct tgggaaa 687

<210> 406
<211> 687
<212> DNA
<213> Artificial Sequence

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

<400> 406
gaaagtaagt atggccctcc ttgccctccg tgccctgcac ctgagttcct cggcggtcct 60

tcagtgtttt tgtttccacc caaacctaaa gacaccctta tgatctctcg aacacctgaa 120

gtaacctgtg tagttgttga tgtctcacag gaagatccgg aggttcaatt taattggtac 180

gtcgatggtg ttgaagtgca taatgcgaag actaagccga gagaggaaca gttcaattcc 240

acttatcgcg tggtttcagt ccttcaggtc ttgcacgtgg attggcttaa cggaaaggaa 300

tataagtgca aggtaagtaa taaagggctt ccatcaagca ttgaaaaaac cataagtaaa 360

gcaaaaggac aaccgaggga gccccaagtc tacacgcttc ctccttctca ggaggagatg 420

accaaaaacc aggtaagttt gacgtgtttg gtaaaggggt tttatccctc agatattgtt 480

gtcgaatggg agtctaatgg tcagcctgag aacaattaca agactacgcc acccgttctg 540

gattcagacg gatctttctt cctctacagc agattgacgg tagacaaaag ccgctggcaa 600

gagggcaatg tcttcagttg ttctgtaatg cacgaagccc tccataatca ctacacgcag 660

aaatctctga gcttgtctct tgggaaa 687

<210> 407
<211> 687
<212> DNA
<213> Artificial Sequence

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

<400> 407
gaaagtaagt atggccctcc ttgccctccg tgccctgcac ctgagttcct cggcggtcct 60

tcagtgtttt tgtttccacc caaacctaaa gacaccctta tgatctctcg aacacctgaa 120

gtaacctgtg tagttgttga tgtctcacag gaagatccgg aggttcaatt taattggtac 180

gtcgatggtg ttgaagtgca taatgcgaag actaagccga gagaggaaca gttcaattcc 240

acttatcgcg tggtttcagt ccttcaggtc ttgcacgtgg attggcttaa cggaaaggaa 300

tataagtgca aggtaagtaa taaagggctt ccatcaagca ttgaaaaaac cataagtaaa 360

gcaaaaggac aaccgaggga gccccaagtc tacacgcttc ctccttctca ggaggagatg 420

accaaaaacc aggtaagttt gacgtgtttg gtaaaggggt tttatccctc agatattgtt 480

gtcgaatggg agtctaatgg tcagcctgag aacaattaca agactacgcc acccgttctg 540

gattcagacg gatctttctt cctctacagc aaattgacgg tagacaaaag ccgctggcaa 600

gagggcaatg tcttcagttg ttctgtaatg cacgaagccc tccataatca ctacacgcag 660

aaatctctga gcttgtctct tgggaaa 687

<210> 408
<211> 60
<212> DNA
<213> Artificial Sequence

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

<400> 408
ggtggtggag gatcgggagg tggaggatct ggaggaggag gatcgggtgg aggaggatcc 60

<210> 409
<211> 108
<212> DNA
<213> Artificial Sequence

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

<400> 409
gcgggctcag gcggctcagg cggaagcggc gggtctccag tgccttcaac ccctcccacc 60

aattcaagct ccaccccacc gacaccatca ccgtcagcct ctggaagc 108

<210> 410
<211> 132
<212> DNA
<213> Artificial Sequence

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

<400> 410
gcaggaagtg gcggatccgg cggttctggt ggttctcctg tgccttctac tcctccaact 60

cccagtccga gtaccccacc cactccgtca ccttccggtg gtagcggtaa ttctagtggc 120

agtggcggat ca 132

<210> 411
<211> 144
<212> DNA
<213> Artificial Sequence

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

<400> 411
gcaggctctg ggaattcatc cggctctggt ggaagtggcg ggtcaggtaa ttcaagcggg 60

tctggcggta gccctgtgcc atccacaccg ccaactccat ctccctctac tcctccaacg 120

ccaagcccct cagcatccgg atct 144

<210> 412
<211> 72

<212> DNA
<213> Artificial Sequence

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

<400> 412
gcggaagcgg cggctaaaga ggcagccgct aaggaagcag ccgctaagga agcggcagcg 60

aaggctggta gc 72

<210> 413
<211> 75
<212> DNA
<213> Artificial Sequence

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

<400> 413
ggcaccaccc caaatccccc ggccagtagc tccaccacag gctcatccac cccaacgaac 60

cccccggcag gttca 75

<210> 414
<211> 111
<212> DNA
<213> Artificial Sequence

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

<400> 414
gctgggtcac ctggtgctgg caacggtggt aacaacggtg gtaatcctcc tcccccgact 60

accacgacta gcagcgcccc ggctacgacc actacggcgt ccgcagggtc a 111

<210> 415
<211> 66
<212> DNA
<213> Artificial Sequence

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

oligonucleotide"

<400> 415
ggcggcggta gtgccggagg gggatctgcc ggcggtggat cagcgggtgg cggctctgcg 60

ggaagc 66

<210> 416
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 416
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 417
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 417
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 418
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 418
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgaggatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 419
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 419
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 420
<211> 1140
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 420
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 421
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 421
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aaccaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 422
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 422
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 423
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 423
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 424
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 424
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cctgatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 425
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 425
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cagcatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 426
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 426
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 427
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 427
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 428
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 428
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 429
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 429
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 430
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 430
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 431
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 431
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 432
<211> 1140

<212> DNA
<213> Artificial Sequence

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

<400> 432
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 433
<211> 1140
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 433
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 434
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 434
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 435
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 435
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 436
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 436
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

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aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 437
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 437
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 438
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 438
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 439
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 439
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagttgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

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ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

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<213> Artificial Sequence

<220>
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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

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aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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polynucleotide"

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acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

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gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

<220>
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acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

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gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

<220>
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polynucleotide"

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acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

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<213> Artificial Sequence

<220>
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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 451
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 452
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 452
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 453
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 453
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 454
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 454
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 455
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 455
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 456
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 456
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgaggatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 457
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 457
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 458
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 458
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 459
<211> 1140

<212> DNA
<213> Artificial Sequence

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

<400> 459
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aaccaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 460
<211> 1140
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 460
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcagggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 461
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 461
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 462
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 462
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

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gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

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gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

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cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

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acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 474
<211> 1140
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 474
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 475
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 475
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 476
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 476
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 477
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 477
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagttgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcagggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 478
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 478
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcagggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 479
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 479
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcagggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 480
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 480
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 481
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 481
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 482
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 482
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 483
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 483
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 484
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 484
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 485
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 485
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 486
<211> 1140

<212> DNA
<213> Artificial Sequence

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

<400> 486
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 487
<211> 1140
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 487
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcagggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 488
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 488
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 489
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 489
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 490
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 490
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 491
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 491
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 492
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 492
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

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aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 493
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 493
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 494
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 494
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 495
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 495
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 496
<211> 1140
<212> DNA
<213> Artificial Sequence

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

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

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ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

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gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

<220>
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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<210> 498
<211> 1140
<212> DNA
<213> Artificial Sequence

<220>
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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 499
<211> 1140
<212> DNA
<213> Artificial Sequence

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

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

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<211> 1140
<212> DNA
<213> Artificial Sequence

<220>
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polynucleotide"

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cctgatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

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ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 501
<211> 1140
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cagcatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

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aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

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gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 502
<211> 1140
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 503
<211> 1140
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<213> Artificial Sequence

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

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

<220>
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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

<220>
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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

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<213> Artificial Sequence

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

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<213> Artificial Sequence

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tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 552
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 552
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 553
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 553
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagttgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 554
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 554
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 555
<211> 1140
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 555
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 556
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 556
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 557
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 557
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 558
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 558
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 559
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 559
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 560
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 560
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

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aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

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aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 561
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 561
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 562
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 562
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 563
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 563
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 564
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 564
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 565
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 565
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 566
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 566
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 567
<211> 1140

<212> DNA
<213> Artificial Sequence

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

<400> 567
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggaggc agcaggtggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt cgacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacaat tcgacataca gagtagtgag cgtcttgcag 720

gtgctgcacg ttgactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttggtgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgacgag cttacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gtggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 568
<211> 1146
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 568
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 569
<211> 1146
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 569
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 570
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 570
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgaggatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 571
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 571
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 572
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 572
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 573
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 573
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aaccaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 574
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 574
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 575
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 575
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 576
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 576
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cctgatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 577
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 577
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cagcatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 578
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 578
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 579
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 579
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 580
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 580
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 581
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 581
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 582
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 582
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 583
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 583
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 584
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 584
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 585
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 586
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 586
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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 587
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 587
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 588
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 589
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 590
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 590
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 591
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 592
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 592
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 593
<211> 1146

<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

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aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

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gggaaa 1146

<210> 594
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 594
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

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gggaaa 1146

<210> 595
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<213> Artificial Sequence

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

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acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

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gggaaa 1146

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acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

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gggaaa 1146

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polynucleotide"

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acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

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cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

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gggaaa 1146

<210> 598
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<221> source
<223> /note="Description of Artificial Sequence: Synthetic
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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

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cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

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gggaaa 1146

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

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gggaaa 1146

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

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aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

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tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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gggaaa 1146

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

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acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

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aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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polynucleotide"

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

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tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

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gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

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aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 617
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 617
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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 618
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 618
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 619
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 619
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 620
<211> 1146

<212> DNA
<213> Artificial Sequence

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

<400> 620
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 621
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 622
<211> 1146
<212> DNA
<213> Artificial Sequence

<220>

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 623
<211> 1146
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 624
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 624
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 625
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 625
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 626
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 626
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 627
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 627
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 628
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 628
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 629
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 629
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 630
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 630
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 631
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 631
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 632
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 632
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 633
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 633
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 634
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 634
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 635
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 635
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 636
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 636
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 637
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 637
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 638
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 638
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 639
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 639
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 640
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 640
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 641
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 641
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 642
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 642
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 643
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 643
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttacagtct tgcaccaaga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgctg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 644
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 644
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 645
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 645
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 646
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 646
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgaggatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 647
<211> 1146

<212> DNA
<213> Artificial Sequence

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

<400> 647
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 648
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 648
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 649
<211> 1146
<212> DNA
<213> Artificial Sequence

<220>

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

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cttcagatga ttttgaacgg aaccaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 650
<211> 1146
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 650
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 651
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 652
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 652
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cctgatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 653
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 653
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cagcatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 654
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 655
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 655
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 656
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 656
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 657
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 657
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

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aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 658
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 658
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

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gggaaa 1146

<210> 659
<211> 1146
<212> DNA
<213> Artificial Sequence

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

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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 660
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 660
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 661
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 661
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acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 662
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 662
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 663
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 663
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 664
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 664
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 665
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 665
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 666
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 666
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 667
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 667
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagttgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 668
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 668
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 669
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 669
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

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ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 670
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 670
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 671
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 671
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 672
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 672
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 673
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 673
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 674
<211> 1146

<212> DNA
<213> Artificial Sequence

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

<400> 674
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 675
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 675
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 676
<211> 1146
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 676
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 677
<211> 1146
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 677
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

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aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 678
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 678
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 679
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 679
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 680
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 680
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 681
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 681
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca gattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 682
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 682
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagtattg aatcttgctc agtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 683
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 683
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 684
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 684
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgaggatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 685
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 685
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 686
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 686
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 687
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 687
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cttcagatga ttttgaacgg aaccaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 688
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 688
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag ttctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 689
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 689
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgatacg taacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 690
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 690
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cctgatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 691
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 691
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cagcatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 692
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 692
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 693
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 693
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 694
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 694
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 695
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 695
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 696
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 696
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 697
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 697
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctgaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 698
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 698
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 699
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 699
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 700
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 700
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 701
<211> 1146

<212> DNA
<213> Artificial Sequence

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

<400> 701
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tgctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 702
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 702
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tcagatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 703
<211> 1146
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 703
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 704
<211> 1146
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 704
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 705
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 705
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 706
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 706
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag tcctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 707
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 707
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

aaagggcttc catcaagcat tgaaaaaacc ataagtaaag caaaaggaca accgagggag 840

ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 708
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 708
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 709
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 709
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgaagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 710
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 710
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgcagaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 711
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 711
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acggcaaagt ttgctatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatggtgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag cgatatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 712
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 712
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cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac taacatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag gaacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

aatgcgaaga ctaagccgag agaggaacag ttcaattcca cttatcgcgt ggtttcagtc 720

cttcaggtct tgcacgtgga ttggcttaac ggaaaggaat ataagtgcaa ggtaagtaat 780

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ccccaagtct acacgcttcc tccttctcag gaggagatga ccaaaaacca ggtaagtttg 900

acgtgtttgg taaaggggtt ttatccctca gatattgttg tcgaatggga gtctaatggt 960

cagcctgaga acaattacaa gactacgcca cccgttctgg attcagacgg atctttcttc 1020

ctctacagca aattgacggt agacaaaagc cgctggcaag agggcaatgt cttcagttgt 1080

tctgtaatgc acgaagccct ccataatcac tacacgcaga aatctctgag cttgtctctt 1140

gggaaa 1146

<210> 713
<211> 1146
<212> DNA
<213> Artificial Sequence

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

<400> 713
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaacct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tgaaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg aaagtaagta tggccctcct 480

tgccctccgt gccctgcacc tgagttcctc ggcggtcctt cagtgttttt gtttccaccc 540

aaacctaaag acacccttat gatctctcga acacctgaag taacctgtgt agttgttgat 600

gtctcacagg aagatccgga ggttcaattt aattggtacg tcgatggtgt tgaagtgcat 660

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<210> 1000
<211> 133
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<213> Artificial Sequence

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

<400> 1000
Ala Pro Ala Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

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Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr
    130


<210> 1001
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 1001
Ala Pro Ala Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
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Ile Ser Thr Leu Thr
    130


<210> 1002
<211> 133
<212> PRT
<213> Artificial Sequence

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

<400> 1002
Ala Pro Ala Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125


Ile Ser Thr Leu Thr
    130


<210> 1003
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<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 1003
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
20 25 30

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
35 40 45

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
50 55 60

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Gly Ser Thr Tyr
65 70 75 80

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
85 90 95

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
100 105 110

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

Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser
130 135 140

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

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
195 200 205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
210 215 220

Pro Gly Lys
225

<210> 1004
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 1004
Ala Pro Ala Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

```
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
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                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380
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<210> 1005
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 1005

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Ala Pro Ala Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110
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Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
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Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 1006
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 1006
Ala Pro Ala Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
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        115                 120                 125

Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
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Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350


Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365


Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380


<210> 1007
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 1007
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Asn
1               5                   10                  15


Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30


Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45


Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60


Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80


Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95


Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110


Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
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Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335
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Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
340 345 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 1008
<211> 380
<212> PRT
<213> Artificial Sequence

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

<400> 1008
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Leu
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
50 55 60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
85 90 95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
115 120 125

```
Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
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            340                 345                 350

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
        355                 360                 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
    370                 375                 380

<210> 1009
<211> 380
<212> PRT
<213> Artificial Sequence

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

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Ala Leu Asn Leu Ala Pro Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ser Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Ser Gln Ser Ile
        115                 120                 125
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Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
    130                 135                 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Lys Thr His Thr Cys Pro
145                 150                 155                 160

Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe
                165                 170                 175

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
            180                 185                 190

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
        195                 200                 205

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
    210                 215                 220

Arg Glu Glu Gln Tyr Gly Ser Thr Tyr Arg Val Val Ser Val Leu Thr
225                 230                 235                 240

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
                245                 250                 255

Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
            260                 265                 270

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg
        275                 280                 285

Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly
    290                 295                 300

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
305                 310                 315                 320

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
                325                 330                 335

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
            340                 345                 350
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Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
355 360 365

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
370 375 380

<210> 1010
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 1010
gcccctgcat cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 1011
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 1011
gcccctgcat cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 1012
<211> 399
<212> DNA
<213> Artificial Sequence

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

<400> 1012
gcccctgcat cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgact 399

<210> 1013
<211> 681
<212> DNA
<213> Artificial Sequence

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

<400> 1013
gataaaactc atacgtgccc accctgcccc gcaccggagc tgcttggggg tccttccgta 60

ttcttgtttc cgccgaagcc gaaggacacg cttatgatta gcaggactcc cgaagtgacg 120

tgcgtcgtag tggacgtgtc gcatgaggac ccggaggtca agttcaactg gtatgtcgat 180

ggcgtagaag tacacaatgc aaagactaaa ccccgcgaag aacagtacgg ttcgacatac 240

agagtagtga gcgtcttgac tgtgctgcac caggactggc tcaacggaaa ggagtataag 300

tgtaaagtat cgaataaggc acttcccgca cctatcgaga aaacgatctc caaggctaag 360

ggtcagccaa gagaacccca agtctacact ctgccccta gccgcgaaga gatgacgaaa 420

aaccaggtgt cgctcacttg tttggtgaag ggtttctatc cgagcgatat tgcggtagag 480

tgggaatcca acgggcagcc agagaacaat tacaagacga cgccaccagt gctggattcg 540

gatgggagct ttttcttgta ctcaaagttg accgtggata aaagccggtg gcagcagggt 600

aatgtgtttt catgctcggt aatgcacgag gccctccata accattatac gcagaaaagc 660

ctttcgctct cacccgggaa a 681

<210> 1014
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 1014
gcccctgcat cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgaagag atgacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 1015
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 1015
gcccctgcat cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgaagag atgacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 1016
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 1016
gcccctgcat cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgaagag atgacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 1017
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 1017
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagaatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgcccctag ccgcgaagag atgacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 1018
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 1018
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagctgct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgatcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgaagag atgacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 1019
<211> 1140
<212> DNA
<213> Artificial Sequence

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

<400> 1019
gcccctacgt cctcctcaac taaaaagacg caacttcagc ttgagcatct tcttctcgac 60

cttcagatga ttttgaacgg aatcaataat tacaaaaatc ctaaacttac tagaatgctc 120

acgtttaagt tttatatgcc aaaaaaggcc actgagttga aacaccttca atgcttggag 180

gaggaactta aaccacttga ggaagccttg aatcttgctc cgtccaaaaa ctttcatttg 240

cggccacgag atctgataag caacatcaac gtgagcgtcc tggaactgaa aggaagcgaa 300

acgacgttta tgtgcgaata tgcagacgaa actgcgacaa tcgttgaatt tctcaatcga 360

tggatcactt ttagccaatc tatcatcagc acgttgactg gtggtggagg atcgggaggt 420

ggaggatctg gaggaggagg atcgggtgga ggaggatccg ataaaactca tacgtgccca 480

ccctgccccg caccggagct gcttgggggt ccttccgtat tcttgtttcc gccgaagccg 540

aaggacacgc ttatgattag caggactccc gaagtgacgt gcgtcgtagt ggacgtgtcg 600

catgaggacc cggaggtcaa gttcaactgg tatgtcgatg gcgtagaagt acacaatgca 660

aagactaaac cccgcgaaga acagtacggt tcgacataca gagtagtgag cgtcttgact 720

gtgctgcacc aggactggct caacggaaag gagtataagt gtaaagtatc gaataaggca 780

cttcccgcac ctatcgagaa aacgatctcc aaggctaagg gtcagccaag agaaccccaa 840

gtctacactc tgccccctag ccgcgaagag atgacgaaaa accaggtgtc gctcacttgt 900

ttggtgaagg gtttctatcc gagcgatatt gcggtagagt gggaatccaa cgggcagcca 960

gagaacaatt acaagacgac gccaccagtg ctggattcgg atgggagctt tttcttgtac 1020

tcaaagttga ccgtggataa aagccggtgg cagcagggta atgtgttttc atgctcggta 1080

atgcacgagg ccctccataa ccattatacg cagaaaagcc tttcgctctc acccgggaaa 1140

<210> 1020
<211> 30
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<220>
<221> SITE
<222> (1)..(30)
<223> /note="This sequence may encompass 1-6 'Gly Gly Gly Gly Ser' repeating units"

<220>
<223> /note="See specification as filed for detailed description of substitutions and preferred embodiments

<400> 1020
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
20 25 30

<210> 1021
<211> 27
<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (2)..(26)
<223> /note="This region may encompass 2-5 'Glu Ala Ala Ala Lys' repeating units"

<220>
<223> /note="See specification as filed for detailed description of substitutions and preferred embodiments"

<400> 1021
Ala Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys
1 5 10 15

Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Ala
20 25

<210> 1022
<211> 25

<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (1)..(25)
<223> /note="This sequence may encompass 1-5 'Gly Gly Gly Ser Ala' repeating units"

<220>
<223> /note="See specification as filed for detailed description of substitutions and preferred embodiments"

<400> 1022
Gly Gly Gly Ser Ala Gly Gly Gly Ser Ala Gly Gly Gly Ser Ala Gly
1 5 10 15

Gly Gly Ser Ala Gly Gly Gly Ser Ala
20 25

<210> 1023
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 1023
Gly Gly Gly Gly Ser
1 5

<210> 1024
<211> 10
<212> PRT
<213> Artificial Sequence

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

<400> 1024

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 1025
<211> 15
<212> PRT
<213> Artificial Sequence

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

<400> 1025
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 1026
<211> 25
<212> PRT
<213> Artificial Sequence

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

<400> 1026
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser
20 25

<210> 1027
<211> 30
<212> PRT
<213> Artificial Sequence

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

<400> 1027
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser

20 25 30

<210> 1028
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic 6xHis tag"

<400> 1028
His His His His His His
1 5

<210> 1029
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 1029
Gly Gly Gly Gly Ser
1 5

<210> 1030
<211> 135
<212> PRT
<213> Artificial Sequence

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

<400> 1030
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1 5 10 15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
20 25 30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
35 40 45

```
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr Gly Ser
    130                 135
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<210> 1031
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1031

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Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95
```

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
100 105 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile
115 120 125

Ile Ser Thr Leu Thr
130

<210> 1032
<211> 133
<212> PRT
<213> Artificial Sequence

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

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

<220>
<221> VARIANT
<222> (16)..(16)
<223> /replace="L" or "N"

<220>
<221> VARIANT
<222> (28)..(28)
<223> /replace="T" or "F"

<220>
<221> VARIANT
<222> (35)..(35)
<223> /replace="E"

<220>
<221> VARIANT
<222> (38)..(38)
<223> /replace="E" or "N" or "Q"

<220>
<221> VARIANT
<222> (42)..(42)
<223> /replace="A" or "K" or "Q"

<220>
<221> VARIANT
<222> (68)..(68)
<223> /replace="Q" or "N"

<220>
<221> VARIANT
<222> (69)..(69)
<223> /replace="A"

<220>
<221> VARIANT
<222> (74)..(74)
<223> /replace="P"

<220>
<221> VARIANT
<222> (84)..(84)
<223> /replace="V"

<220>
<221> VARIANT
<222> (87)..(87)
<223> /replace="R"

<220>
<221> VARIANT
<222> (88)..(88)
<223> /replace="D" or "L" or "S"

<220>
<221> VARIANT
<222> (92)..(92)
<223> /replace="S"

<220>
<221> VARIANT
<222> (125)..(125)
<223> /replace="S"

<220>
<221> VARIANT
<222> (126)..(126)
<223> /replace="K" or "R" or "T"

<220>
<221> SITE
<222> (1)..(133)
<223> /note="Variant residues given in the sequence have no
preference with respect to those in the annotations
for variant positions"

<400> 1032

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
1               5                   10                  15

Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20                  25                  30

Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
        35                  40                  45

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
    50                  55                  60

Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
65                  70                  75                  80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
                85                  90                  95

Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
            100                 105                 110

Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile
        115                 120                 125

Ile Ser Thr Leu Thr
    130
```