SEQUENCE LISTING

<110> SALK INSTITUTE FOR BIOLOGICAL STUDIES

<120> MUTATED FIBROBLAST GROWTH FACTOR (FGF) 1 AND METHODS OF USE

<130> 7158-92040-06

<150> US 61/893,766
<151> 2013-10-21

<150> US 61/949,945
<151> 2014-03-07

<150> US 61/975,530
<151> 2014-04-04

<150> US 62/019,185
<151> 2014-06-30

<160> 238

<170> PatentIn version 3.5

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

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ctcagtgcgg aaagcgtggg ggaggtgtat ataaagagta ccgagactgg ccagtacttg 240

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<210> 2
<211> 155
<212> PRT
<213> Homo sapiens

<400> 2

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1               5                  10                  15

Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser
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Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly
        35                  40                  45

Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu
    50                  55                  60

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

Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu
                85                  90                  95

Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr
            100                 105                 110

Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys
        115                 120                 125

Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala
    130                 135                 140

Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
145                 150                 155
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<210> 3
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<400> 3

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aactggtttg tgggcctcaa gaagaacggg agctgtaagc gcggtcctcg gactcactat 420

ggccagaaag ccatcttgtt tctgcccctc ccggtgtctt ctgactag 468

<210> 4
<211> 155
<212> PRT
<213> Mus musculus

<400> 4

Met Ala Glu Gly Glu Ile Thr Thr Phe Ala Ala Leu Thr Glu Arg Phe
1 5 10 15

Asn Leu Pro Leu Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser
20 25 30

Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly
35 40 45

Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu
50 55 60

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

Ala Met Asp Thr Glu Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu
85 90 95

Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr
100 105 110

Thr Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys
115 120 125

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Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala
    130                 135                 140


Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
145                 150                 155
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<210> 5
<211> 140
<212> PRT
<213> Homo sapiens

<400> 5

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Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
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<210> 6

<211> 137
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 6

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Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly
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Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly Thr Arg
            20                  25                  30


Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu Ser Val
        35                  40                  45


Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met
    50                  55                  60


Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys
65                  70                  75                  80


Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser
                85                  90                  95


Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly
            100                 105                 110


Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu
        115                 120                 125


Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135
```

<210> 7
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 7

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Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
    130
```

<210> 8
<211> 127
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 8

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Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly
1               5                   10                  15
```

```
Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln
            20                  25                  30

Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr
        35                  40                  45

Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln
    50                  55                  60

Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His
65                  70                  75                  80

Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val
                85                  90                  95

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

Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
        115                 120                 125
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<210> 9
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 9

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Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
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50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 10
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 10

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

```
Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  11
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  11

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


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


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Val Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
```

100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 12
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 12

Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe
1 5 10 15

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

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

Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp
50 55 60

Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu
65 70 75 80

Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His
85 90 95

Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Asn
100 105 110

Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
115 120 125

Leu Pro Val Ser Ser Asp
130

<210> 13
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 13

Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe
1 5 10 15

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

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

Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp
50 55 60

Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu
65 70 75 80

Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His
85 90 95

Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Glu
100 105 110

Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
115 120 125

Leu Pro Val Ser Ser Asp
130

<210> 14

<211> 8
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 14

Ala Ala Ala Leu Pro Leu Pro Val
1 5

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

<220>
<223> Synthetic polypeptide

<400> 15

Ile Leu Ala Leu Pro Leu Pro Val
1 5

<210> 16
<211> 8
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 16

Ile Leu Phe Ala Pro Leu Pro Val
1 5

<210> 17
<211> 8
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 17

Ile Leu Phe Leu Pro Ala Pro Ala

1 5

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<211> 414
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<220>
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tacctggcca tggataccga cggcctgctg tacggttcgc aaacgccgaa tgaagaatgc 240

ctgtttctgg aacgtctgga agaaaaccat tacaacacct acatcagtaa aaaacacgcg 300

gagaaaaact ggttcgttgg cctgaagaaa aacggttcct gtaaacgcgg cccgcgcacc 360

cattacggtc aaaaagccat tctgtttctg ccgctgccgg tttcgtccga ctaa 414

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<211> 939
<212> DNA
<213> Homo sapiens

<400> 19
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ccggagatca cctgaggacc cgagccattg atggactcgg acgagaccgg gttcgagcac 180

tcaggactgt gggtttctgt gctggctggt ctgctgggag cctgccaggc acaccccatc 240

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gctgctgacc agagccccga aagtctcctg cagctgaaag ccttgaagcc gggagttatt 420

caaatcttgg gagtcaagac atccaggttc ctgtgccagc ggccagatgg ggccctgtat 480

ggatcgctcc actttgaccc tgaggcctgc agcttccggg agctgcttct tgaggacgga 540

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaag 939

<210> 20
<211> 208
<212> PRT
<213> Homo sapiens

<400> 20

Met Asp Ser Asp Glu Thr Gly Phe Glu His Ser Gly Leu Trp Val Ser
1 5 10 15

Val Leu Ala Gly Leu Leu Gly Ala Cys Gln Ala His Pro Ile Pro Asp
20 25 30

Ser Ser Pro Leu Leu Gln Phe Gly Gly Gln Val Arg Gln Arg Tyr Leu
35 40 45

Tyr Thr Asp Asp Ala Gln Gln Thr Glu Ala His Leu Glu Ile Arg Glu
50 55 60

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

Gln Leu Lys Ala Leu Lys Pro Gly Val Ile Gln Ile Leu Gly Val Lys
85 90 95

Thr Ser Arg Phe Leu Cys Gln Arg Pro Asp Gly Ala Leu Tyr Gly Ser
100 105 110

Leu His Phe Asp Pro Glu Ala Cys Ser Phe Arg Glu Leu Leu Leu Glu
115 120 125

```
Asp Gly Tyr Asn Val Tyr Gln Ser Glu Ala His Gly Leu Pro Leu His
    130                 135                 140

Leu Pro Gly Asn Lys Ser Pro His Arg Asp Pro Ala Pro Arg Gly Pro
145                 150                 155                 160

Ala Arg Phe Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu Pro
                165                 170                 175

Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp Pro
            180                 185                 190

Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala Ser
        195                 200                 205
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<210> 21
<211> 135
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 21

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Gly Gly Gln Val Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His
1               5                   10                  15

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

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

Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr
    50                  55                  60

Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe
65                  70                  75                  80

Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys
```

85 90 95

His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys
100 105 110

Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu
115 120 125

Pro Leu Pro Val Ser Ser Asp
130 135

<210> 22
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 22

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 23
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 23

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Val Leu Pro Val Ser Ser Asp

130 135 140

<210> 24
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 24

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 25
<211> 129
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 25

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Pro Val Ser Ser
115 120 125

Asp

<210> 26
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 26

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Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                  10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Pro Val
        115                 120                 125

Ser Ser Asp
    130
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<210> 27
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 27

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Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                  10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
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20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Pro Val Ser Ser
115 120 125

Asp

<210> 28
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 28

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

```
Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 29
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 29

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser Asp
130 135 140

<210> 30
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 30

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

```
Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140


<210>  31
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  31

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
```

115 120 125

Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser Asp
130 135 140

<210> 32
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 32

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 33
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 33

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 34
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 34

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 35
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 35

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro

1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 36
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 36

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

```
Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
        115                 120                 125

Ser Ser Asp
    130
```

<210> 37
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 37

```
Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
```

50 55 60

Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 38
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 38

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

```
Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
    130


<210>  39
<211>  129
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  39

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
```

100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 40
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 40

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly
100 105 110

Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
115 120 125

Leu Pro Val Ser Ser Asp
130

<210> 41
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 41

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly
100 105 110

Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
115 120 125

Leu Pro Val Ser Ser Asp
130

<210> 42

<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 42

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly
100 105 110

Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
115 120 125

Leu Pro Val Ser Ser Asp
130

<210> 43
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 43

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                  10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly
            100                 105                 110

Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
        115                 120                 125

Leu Pro Val Ser Ser Asp
    130
```

<210> 44
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 44

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                  10                  15
```

```
Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val
    50                  55                  60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe
                85                  90                  95

Leu Gly Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln
            100                 105                 110

Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
        115                 120                 125
```

<210> 45
<211> 123
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 45

```
Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly
```

50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly
85 90 95

Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala
100 105 110

Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
115 120

<210> 46
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 46

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe
85 90 95

Leu Gly Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln
100 105 110

Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
115 120 125

<210> 47
<211> 123
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 47

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly
85 90 95

Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala
100 105 110

Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
115 120

<210> 48

<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 48

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Gly Trp Phe
85 90 95

Leu Gly Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln
100 105 110

Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
115 120 125

<210> 49
<211> 123
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 49

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro

```
1               5                   10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly
    50                  55                  60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80

Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly
                85                  90                  95

Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala
            100                 105                 110

Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
        115                 120
```

<210> 50
<211> 125
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 50

```
Val Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45
```

```
Ser Thr Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val
    50                  55                  60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Gly Trp Phe
                85                  90                  95

Leu Gly Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln
            100                 105                 110

Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
        115                 120                 125
```

<210> 51
<211> 123
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 51

```
Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly
    50                  55                  60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80

Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly
```

85 90 95

Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala
100 105 110

Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
115 120

<210> 52
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 52

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Asn Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 53
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 53

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Glu Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 54

<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 54

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 55
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 55

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Asn Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 56
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 56

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15
```

```
Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110

Lys Asn Gly Ser Val Glu Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

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


<210>  57
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  57

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
```

35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 58
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 58

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

```
Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125


Asp
```

<210> 59
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 59

```
Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
```

85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 60
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 60

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
100 105 110

```
His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125


Asp



<210>  61
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  61

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
```

130

<210> 62
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 62

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 63
<211> 131
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 63

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Asn Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 64
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 64

```
Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Glu Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125


Asp
```

<210> 65
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 65

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
```

20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Asn Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 66
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 66

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

```
Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Glu Arg Gly Pro Arg Thr
            100                 105                 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125

Asp
```

<210> 67
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 67

```
Phe Asn Leu Pro Pro Gly Asn Tyr Thr Thr Pro Lys Leu Leu Tyr Cys
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 68
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 68

Phe Asn Leu Pro Pro Gly Asn Tyr Thr Thr Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

```
Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  69
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  69

Phe Asn Leu Pro Pro Gly Asn Tyr Thr Thr Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Asn Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
```

115 120 125

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

<210> 70
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 70

Phe Asn Leu Pro Pro Gly Asp Gln Asp Gln Asn Gln Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 71
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 71

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His
20 25 30

Ile Gln Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 72
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 72

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His Ile Gln
20 25 30

Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 73
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 73

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys

1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

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

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 74
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 74

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His
20 25 30

Ile Gln Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35   40   45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50   55   60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65   70   75   80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85   90   95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100   105   110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115   120   125

Ser Ser Asp
    130

<210> 75
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 75

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1   5   10   15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His Ile Gln
            20   25   30

Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35   40   45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly

50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 76
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 76

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His
20 25 30

Ile Gln Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

```
Glu Glu Asn Gly Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
    130


<210>  77
<211>  129
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  77

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His Ile Gln
            20                  25                  30


Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn Gly Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
```

100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 78
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 78

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

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

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn Gly Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

```
Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140


<210>  79
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  79

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His
            20                  25                  30


Ile Gln Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn Gly Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
    130


<210>  80
```

<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 80

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His Ile Gln
20 25 30

Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn Gly Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
115 120 125

Asp

<210> 81
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 81

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Pro Val Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
    130
```

<210> 82
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 82

```
Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15
```

```
Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95

Phe Val Gly Leu Lys Lys Asn Gly Ser Pro Val Arg Gly Pro Arg Thr
            100                 105                 110

His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125

Asp
```

<210> 83
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 83

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
```

35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Pro Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 84
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 84

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

```
Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  85
<211>  145
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  85

Pro Ala Leu Pro Glu Asp Gly Gly Ala Ala Phe Pro Pro Gly His Phe
1               5                   10                  15


Lys Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg
            20                  25                  30


Ile His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp Pro
        35                  40                  45


His Val Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser Ile
    50                  55                  60


Lys Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg
65                  70                  75                  80


Leu Leu Ala Ser Lys Cys Val Thr Glu Glu Cys Phe Phe Phe Glu Arg
```

85 90 95

Leu Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Ser Ser
100 105 110

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

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

Ser
145

<210> 86
<211> 42
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 86

Pro Gly Leu Pro Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro
1 5 10 15

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

Ser Gln Gly Arg Ser Pro Ser Tyr Ala Ser
35 40

<210> 87
<211> 177
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 87

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys

1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu
130 135 140

Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp
145 150 155 160

Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala
165 170 175

Ser

<210> 88
<211> 168
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 88

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                  10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Gly
        115                 120                 125


Leu Pro Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro Gln Pro
    130                 135                 140


Pro Asp Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly Pro Ser Gln
145                 150                 155                 160


Gly Arg Ser Pro Ser Tyr Ala Ser
                165
```

<210> 89
<211> 166
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 89

```
Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Gly Leu Pro
        115                 120                 125


Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp
    130                 135                 140


Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg
145                 150                 155                 160


Ser Pro Ser Tyr Ala Ser
                165
```

<210> 90

<211> 168
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 90

```
Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                  10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Pro Gly
        115                 120                 125


Leu Pro Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro Gln Pro
    130                 135                 140


Pro Asp Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly Pro Ser Gln
145                 150                 155                 160


Gly Arg Ser Pro Ser Tyr Ala Ser
                165
```

<210> 91
<211> 166
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 91

```
Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Pro Gly Leu Pro
        115                 120                 125


Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp
    130                 135                 140


Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg
145                 150                 155                 160


Ser Pro Ser Tyr Ala Ser
```

165

<210> 92
<211> 177
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 92

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Val Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu
130 135 140

Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp
145 150 155 160

```
Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala
                165                 170                 175


Ser
```

<210> 93
<211> 168
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 93

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Gly
        115                 120                 125


Leu Pro Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro Gln Pro
```

130 135 140

Pro Asp Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly Pro Ser Gln
145 150 155 160

Gly Arg Ser Pro Ser Tyr Ala Ser
165

<210> 94
<211> 166
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 94

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Gly Leu Pro
115 120 125

Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp
130 135 140

Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg
145 150 155 160

Ser Pro Ser Tyr Ala Ser
165

<210> 95
<211> 177
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 95

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys

115 120 125

Ala Ile Leu Trp Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu
130 135 140

Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp
145 150 155 160

Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala
165 170 175

Ser

<210> 96
<211> 162
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 96

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe
85 90 95

```
Leu Gly Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln
            100                 105                 110

Lys Ala Ile Leu Phe Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro
        115                 120                 125

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

Asp Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr
145                 150                 155                 160

Ala Ser
```

<210> 97
<211> 160
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 97

```
Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30

Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45

Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly
    50                  55                  60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly
```

85 90 95

Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala
100 105 110

Ile Leu Phe Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu Pro
115 120 125

Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp Pro
130 135 140

Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala Ser
145 150 155 160

<210> 98
<211> 171
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 98

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

```
Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly
            100                 105                 110

Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
        115                 120                 125

Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu Pro Pro Gly Ile Leu Ala
    130                 135                 140

Pro Gln Pro Pro Asp Val Gly Ser Ser Asp Pro Leu Ser Met Val Gly
145                 150                 155                 160

Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala Ser
                165                 170
```

<210> 99
<211> 216
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 99

```
Met Arg Ser Gly Cys Val Val Val His Val Trp Ile Leu Ala Gly Leu
1               5                   10                  15

Trp Leu Ala Val Ala Gly Arg Pro Leu Ala Phe Ser Asp Ala Gly Pro
            20                  25                  30

His Val His Tyr Gly Trp Gly Asp Pro Ile Arg Leu Arg His Leu Tyr
        35                  40                  45

Thr Ser Gly Pro His Gly Leu Ser Ser Cys Phe Leu Arg Ile Arg Ala
    50                  55                  60

Asp Gly Val Val Asp Cys Ala Arg Gly Gln Ser Ala His Ser Leu Leu
65                  70                  75                  80

Glu Ile Lys Ala Val Ala Leu Arg Thr Val Ala Ile Lys Gly Val His
```

85 90 95

Ser Val Arg Tyr Leu Cys Met Gly Ala Asp Gly Lys Met Gln Gly Leu
100 105 110

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

Asp Gly Tyr Asn Val Tyr Arg Ser Glu Lys His Arg Leu Pro Val Ser
130 135 140

Leu Ser Ser Ala Lys Gln Arg Gln Leu Tyr Lys Asn Arg Gly Phe Leu
145 150 155 160

Pro Leu Ser His Phe Leu Pro Met Leu Pro Met Val Pro Glu Glu Pro
165 170 175

Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu
180 185 190

Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr Gly Leu Glu Ala
195 200 205

Val Arg Ser Pro Ser Phe Glu Lys
210 215

<210> 100
<211> 48
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 100

Leu Pro Met Val Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu
1 5 10 15

Ser Asp Met Phe Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe
20 25 30

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

<210> 101
<211> 183
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 101

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Pro Leu Leu Pro Met Val Pro Glu Glu Pro Glu
130 135 140

Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu

145 150 155 160

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

Arg Ser Pro Ser Phe Glu Lys
180

<210> 102
<211> 174
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 102

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Leu Pro
115 120 125

```
Met Val Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu Ser Asp
    130                 135                 140


Met Phe Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe Gly Leu
145                 150                 155                 160


Val Thr Gly Leu Glu Ala Val Arg Ser Pro Ser Phe Glu Lys
                165                 170


<210>  103
<211>  172
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  103

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Leu Pro Met Val
```

115 120 125

Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe
130 135 140

Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr
145 150 155 160

Gly Leu Glu Ala Val Arg Ser Pro Ser Phe Glu Lys
165 170

<210> 104
<211> 183
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 104

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

```
Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Val Leu Leu Pro Met Val Pro Glu Glu Pro Glu
    130                 135                 140


Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu
145                 150                 155                 160


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


Arg Ser Pro Ser Phe Glu Lys
            180


<210>  105
<211>  174
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  105

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
```

85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Leu Pro
115 120 125

Met Val Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu Ser Asp
130 135 140

Met Phe Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe Gly Leu
145 150 155 160

Val Thr Gly Leu Glu Ala Val Arg Ser Pro Ser Phe Glu Lys
165 170

<210> 106
<211> 172
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 106

Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

```
Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Val Leu Leu Pro Met Val
        115                 120                 125


Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe
    130                 135                 140


Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr
145                 150                 155                 160


Gly Leu Glu Ala Val Arg Ser Pro Ser Phe Glu Lys
                165                 170


<210>  107
<211>  183
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  107

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Trp Leu Pro Leu Leu Pro Met Val Pro Glu Glu Pro Glu
130 135 140

Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu
145 150 155 160

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

Arg Ser Pro Ser Phe Glu Lys
180

<210> 108
<211> 174
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 108

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

```
Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Leu Pro
        115                 120                 125


Met Val Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu Ser Asp
    130                 135                 140


Met Phe Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe Gly Leu
145                 150                 155                 160


Val Thr Gly Leu Glu Ala Val Arg Ser Pro Ser Phe Glu Lys
                165                 170


<210>  109
<211>  172
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  109

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
```

35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr
100 105 110

His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Leu Pro Met Val
115 120 125

Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe
130 135 140

Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr
145 150 155 160

Gly Leu Glu Ala Val Arg Ser Pro Ser Phe Glu Lys
165 170

<210> 110
<211> 177
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 110

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly Ile Lys Lys Asn Gly
100 105 110

Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
115 120 125

Leu Leu Pro Met Val Pro Glu Glu Pro Glu Asp Leu Arg Gly His Leu
130 135 140

Glu Ser Asp Met Phe Ser Ser Pro Leu Glu Thr Asp Ser Met Asp Pro
145 150 155 160

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

Lys

<210> 111
<211> 168
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 111

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile

1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe
85 90 95

Leu Gly Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln
100 105 110

Lys Ala Ile Leu Phe Leu Pro Leu Leu Pro Met Val Pro Glu Glu Pro
115 120 125

Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu
130 135 140

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

Val Arg Ser Pro Ser Phe Glu Lys
165

<210> 112
<211> 166
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 112

```
Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1               5                   10                  15


Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
            20                  25                  30


Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
        35                  40                  45


Glu Thr Gly Gln Tyr Leu Ala Ile Asp Thr Asp Gly Leu Val Tyr Gly
    50                  55                  60


Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Gly Trp Phe Leu Gly
                85                  90                  95


Ile Lys Lys Asn Gly Ser Val Lys Gly Thr His Tyr Gly Gln Lys Ala
            100                 105                 110


Ile Leu Phe Leu Pro Leu Leu Pro Met Val Pro Glu Glu Pro Glu Asp
        115                 120                 125


Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu Thr
    130                 135                 140


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


Ser Pro Ser Phe Glu Lys
                165


<210>  113
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide
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<400> 113

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110


Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 114
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 114

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15
```

```
Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110

Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 115
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 115

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
```

35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Cys Val Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 116
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 116

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

```
Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65                  70                  75                  80


Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
                85                  90                  95


Phe Val Gly Leu Asp Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr
            100                 105                 110


His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125


Asp



<210>  117
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  117

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
```

85 90 95

Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Val Val Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 118
<211> 129
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 118

Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro
1 5 10 15

Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln
20 25 30

Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr
35 40 45

Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly
50 55 60

Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu
65 70 75 80

Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp
85 90 95

Phe Val Gly Leu Asp Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr
100 105 110

```
His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser
        115                 120                 125


Asp



<210>  119
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  119

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110


Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
```

130 135 140

<210> 120
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 120

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 121
<211> 90
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 121

```
Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15


Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45


Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60


Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65                  70                  75                  80


Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu
                85                  90
```

<210> 122
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 122

```
Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15


Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Ala Pro Glu Ile Cys
        35
```

<210> 123
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<220>
<221> MISC_FEATURE
<222> (33)..(33)
<223> Xaa = Pro or Ser

<220>
<221> MISC_FEATURE
<222> (34)..(34)
<223> Xaa = Pro or Gln

<220>
<221> MISC_FEATURE
<222> (35)..(35)
<223> Xaa = Ala or Gln

<220>
<221> MISC_FEATURE
<222> (36)..(36)
<223> Xaa = His or no amino acid

<400> 123

Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln
1 5 10 15

His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Xaa Xaa Xaa Xaa Cys
35

<210> 124
<211> 38
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = Glu, Leu, Pro, Gln or Arg

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = Ala, Pro or Ser

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = Asp, Gly, Ile or Asn

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Xaa = Glu, Gly or Gln

<220>
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<222> (6)..(6)
<223> Xaa = Phe or Gln

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Xaa = Phe, Lys, Pro, Gln, Arg or Thr

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Xaa = Glu or no amino acid

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Xaa = Gly, Asn, Arg or Ser

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Xaa = Asn or Ser

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Xaa = His, Asn, Gln or Arg

<220>

<221> MISC_FEATURE
<222> (15)..(15)
<223> Xaa = Ile or Val

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> Xaa = Ala, Glu, Leu, Pro, Gln, Arg or Val

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> Xaa = Ala, His, Pro, Gln, Arg or Thr

<220>
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<222> (20)..(20)
<223> Xaa = Leu, Arg or Val

<220>
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<222> (24)..(24)
<223> Xaa = Asp, Glu or Val

<220>
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<222> (25)..(25)
<223> Xaa = Asp, Asn or Pro

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Xaa = Gly, Leu or Gln

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Xaa = Asp, Gly, Asn or Ser

<220>
<221> MISC_FEATURE
<222> (34)..(34)
<223> Xaa = Ala, Glu, Lys or Thr

<220>
<221> MISC_FEATURE
<222> (35)..(35)
<223> Xaa = Asp, Gly, Leu, Asn or Ser

<220>
<221> MISC_FEATURE
<222> (36)..(36)

<223> Xaa = Ala or no amino acid

<220>
<221> MISC_FEATURE
<222> (37)..(37)
<223> Xaa = His or no amino acid

<400> 124

Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Gly Xaa Cys Xaa Pro
1 5 10 15

Xaa Xaa Trp Xaa Cys Asp Gly Xaa Xaa Asp Cys Xaa Asp Xaa Ser Asp
20 25 30

Glu Xaa Xaa Xaa Xaa Cys
35

<210> 125
<211> 38
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = Ala, Gly or Pro

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = Ala, Pro or Ser

<220>
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<222> (4)..(4)
<223> Xaa = Asp, Gly or Asn

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Xaa = Glu or Gln

<220>
<221> MISC_FEATURE

<222> (7)..(7)
<223> Xaa = Gln, Arg or Thr

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Xaa = Gly, Asn, Arg or Ser

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Xaa = Gly, Asn or Ser

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Xaa = Gly or Thr

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Xaa = Gly, Lys, Gln or Ser

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Xaa = Ile, Lys or no amino acid

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Xaa = Ile, Leu or Val

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> Xaa = Leu, Gln, Arg or Val

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> Xaa = Ala, Glu, His or Pro

<220>
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<222> (20)..(20)
<223> Xaa = Leu, Arg or Val

<220>
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<222> (24)..(24)
<223> Xaa = Asp, Leu or Val

<220>
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<223> Xaa = Asp or Asn

<220>
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<223> Xaa = Gly or Asn

<220>
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<222> (34)..(34)
<223> Xaa = Ala, Glu, Lys, Pro or Ser

<220>
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<222> (35)..(35)
<223> Xaa = Gly, Leu, Pro or Ser

<220>
<221> MISC_FEATURE
<222> (36)..(36)
<223> Xaa = Ala, Glu, Val or no amino acid

<220>
<221> MISC_FEATURE
<222> (37)..(37)
<223> Xaa = Ile, Thr or no amino acid

<400> 125

Cys Xaa Xaa Xaa Xaa Phe Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Pro
1 5 10 15

Xaa Xaa Trp Xaa Cys Asp Gly Xaa Xaa Asp Cys Gly Asp Xaa Ser Asp
20 25 30

Glu Xaa Xaa Xaa Xaa Cys
35

<210> 126
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 126

Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln
1 5 10 15

His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

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

<210> 127
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 127

Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln
1 5 10 15

His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Ser Gln Gln Cys
35

<210> 128
<211> 35
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 128

Cys Arg Ala Gly Glu Phe Arg Cys Ser Asn Gly Arg Cys Val Pro Leu
1 5 10 15

Thr Trp Leu Cys Asp Gly Glu Asp Asp Cys Gln Asp Asn Ser Asp Glu

20 25 30

Lys Asn Cys
35

<210> 129
<211> 38
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 129

Cys Pro Ser Asn Gln Phe Pro Cys Arg Ser Thr Gly Ile Cys Ile Pro
1 5 10 15

Leu Ala Trp Val Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp
20 25 30

Glu Ser Pro Ala His Cys
35

<210> 130
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 130

Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln
1 5 10 15

His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Pro Pro Ala His Cys
35

<210> 131

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

<220>
<223> Synthetic polypeptide

<220>
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<223> Xaa = Ser or Gly

<220>
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<222> (17)..(17)
<223> Xaa = His or Thr

<220>
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<222> (19)..(19)
<223> Xaa = Val or Leu

<220>
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<222> (33)..(33)
<223> Xaa = Pro or Ser

<220>
<221> MISC_FEATURE
<222> (36)..(36)
<223> Xaa = His or Thr

<400> 131

Cys Leu Pro Asp Glu Phe Gln Cys Xaa Ser Gly Arg Cys Ile Pro Gln
1 5 10 15

Xaa Trp Xaa Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Xaa Pro Ala Xaa Cys
35

<210> 132
<211> 38
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa = Ala, Gly, Pro or Arg

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Xaa = Ala or Pro

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Xaa = Asp, Gly, Asn or Ser

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Xaa = Glu or Gln

<220>
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<222> (7)..(7)
<223> Xaa = Gln, Arg or Thr

<220>
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<222> (9)..(9)
<223> Xaa = Gly, Ser, Lys

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<223> Xaa = Gly or Thr

<220>
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<222> (12)..(12)
<223> Xaa = Gly, His or Arg

<220>
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<222> (13)..(13)
<223> Xaa = Arg or no amino acid

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<223> Xaa = Ile, Leu or Val

<220>
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<400> 132

Cys Xaa Xaa Xaa Xaa Phe Xaa Cys Xaa Asn Xaa Xaa Xaa Cys Xaa Xaa
1 5 10 15

Xaa Xaa Trp Xaa Cys Asp Gly Xaa Asp Asp Cys Xaa Asp Gly Ser Asp
20 25 30

Glu Xaa Xaa Xaa Xaa Cys
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<210> 133
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 133

Cys Gly Pro Asp Gln Phe Arg Cys Ser Ser Gly Lys Cys Ile Pro Gln
1 5 10 15

His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Ser Pro Ala Thr Cys
35

<210> 134
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 134

Cys Gly Ala Asn Glu Phe Gln Cys Arg Ser Thr Gly Ile Cys Val Pro
1 5 10 15

Val Glu Trp Val Cys Asp Gly Asp Asn Asp Cys Gly Asp Gly Ser Asp
20 25 30

Glu Pro Pro Val Cys
        35

<210> 135
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 135

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1   5   10   15

Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20   25   30

Ala Pro Glu Ile Cys
        35

<210> 136
<211> 37
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 136

Cys Gly Pro Asp Glu Phe Arg Cys Asn Asn Gly Gln Cys Ile Pro Leu
1   5   10   15

Pro Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Asn Ser Asp Glu
            20   25   30

Pro Leu Glu Ile Cys
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<210> 137
<211> 35

<212> PRT
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<220>
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<400> 137

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

Lys Gly Cys
35

<210> 138
<211> 36
<212> PRT
<213> Artificial sequence

<220>
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<400> 138

Cys Pro Pro Asp Glu Phe Gln Cys Arg Gly Thr Lys Lys Cys Leu Pro
1 5 10 15

Leu Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asp Ser Asp
20 25 30

Glu Glu Ser Cys
35

<210> 139
<211> 37
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<220>
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<400> 139

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Cys Leu Pro Asp Glu Phe Gln Cys Gly Ser Gly Arg Cys Ile Pro Gln
1               5                   10                  15


His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Pro Pro Ala His Cys
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<210>  140
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<220>
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<400>  140

Cys Ala Pro Gly Glu Phe Thr Cys Lys Asn Thr Gly Arg Cys Ile Pro
1               5                   10                  15


Leu Asn Trp Arg Cys Asp Gly Asp Asp Asp Cys Gly Asp Gly Ser Asp
            20                  25                  30


Glu Thr Asp Cys
        35


<210>  141
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<400> 141

Cys Xaa Xaa Xaa Xaa Phe Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Pro
1 5 10 15

Xaa Xaa Trp Xaa Cys Asp Gly Xaa Xaa Asp Cys Gly Asp
20 25

<210> 142
<211> 48
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 142

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1 5 10 15

Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
35 40 45

<210> 143

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

<220>
<223> Synthetic polypeptide

<400> 143

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
1 5 10 15

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
20 25 30

Ala Ser Glu Pro Pro Gly Ser Leu
35 40

<210> 144
<211> 38
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<400> 144

Cys Xaa Xaa Xaa Xaa Phe Xaa Cys Xaa Asn Xaa Xaa Xaa Cys Xaa Xaa
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Xaa Xaa Trp Xaa Cys Asp Gly Xaa Asp Asp Cys Xaa Asp Gly Ser Asp
20 25 30

Glu Xaa Xaa Xaa Xaa Cys
35

<210> 145
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<400> 145

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Xaa Xaa Trp Xaa Cys Asp Gly Xaa Xaa Asp Cys Xaa Asp Xaa Ser Asp
            20   25   30

Glu Xaa Xaa Xaa Xaa Cys
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<210> 146
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<400> 146

Cys Xaa Xaa Xaa Xaa Phe Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Pro
1   5   10   15

Xaa Xaa Trp Xaa Cys Asp Gly Xaa Xaa Asp Cys Gly Asp Xaa Ser Asp
            20   25   30

Glu Xaa Xaa Xaa Xaa Cys
        35

<210> 147
<211> 36
<212> PRT
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<400> 147

Cys Gly Xaa Xaa Leu Phe Thr Cys Xaa Xaa Xaa Xaa Ile Cys Ile Ser
1   5   10   15

Xaa Xaa Trp Xaa Cys Asp Gly Xaa Asp Asp Cys Xaa Asp Asn Ser Asp
            20   25   30

Glu Xaa Xaa Cys
        35

<210> 148
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 148

Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1   5   10   15

His Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20   25   30

Glu Asn Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
        35   40   45

<210> 149
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 149

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

Gln Val Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Asp Ser Cys
35

<210> 150
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 150

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Asn Tyr Cys
35

<210> 151
<211> 36
<212> PRT
<213> Artificial sequence

<220>
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<400> 151

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20   25   30

Glu Thr Asn Cys
        35

<210> 152
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 152

Cys Gly Glu Gly Leu Phe Thr Cys Gly Ser Thr Asn Ile Cys Ile Ser
1   5   10   15

Ser Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20   25   30

Glu Asn Asn Cys
        35

<210> 153
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 153

Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1   5   10   15

His Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20   25   30

Glu Asn Asn Cys
        35

<210> 154
<211> 36
<212> PRT
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<220>
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<400> 154

Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

Glu Ala Trp Ile Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Lys Asn Cys
35

<210> 155
<211> 36
<212> PRT
<213> Artificial sequence

<220>
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<400> 155

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Ala Lys Ile Cys Ile Ser
1 5 10 15

His Ala Trp Val Cys Asp Gly Ile Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Asn Asn Cys
35

<210> 156
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 156

Cys Gly Ala Gly Leu Phe Thr Cys Arg Asn Ser Lys Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Asp Asp Asn Ser Asp
20 25 30

Glu Lys Tyr Cys
35

<210> 157
<211> 36
<212> PRT
<213> Artificial sequence

<220>
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<400> 157

Cys Gly Ala Ser Leu Phe Thr Cys Arg Arg Ser Asn Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Met Asn Cys
35

<210> 158
<211> 36
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 158

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Lys Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp

            20   25   30

Glu Lys Asn Cys
        35

<210> 159
<211> 47
<212> PRT
<213> Artificial sequence

<220>
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<400> 159

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1   5   10   15

Gln Val Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20   25   30

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

<210> 160
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 160

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1   5   10   15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20   25   30

Glu Asn Tyr Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
        35   40   45

<210> 161

<211> 47
<212> PRT
<213> Artificial sequence

<220>
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<400> 161

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Thr Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
35 40 45

<210> 162
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 162

Cys Gly Glu Gly Leu Phe Thr Cys Gly Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

Ser Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Asn Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
35 40 45

<210> 163
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 163

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Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1               5                   10                  15


Glu Ala Trp Ile Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
            20                  25                  30


Glu Lys Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
        35                  40                  45


<210>  164
<211>  47
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  164

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Ala Lys Ile Cys Ile Ser
1               5                   10                  15


His Ala Trp Val Cys Asp Gly Ile Asp Asp Cys Glu Asp Asn Ser Asp
            20                  25                  30


Glu Asn Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
        35                  40                  45


<210>  165
<211>  47
<212>  PRT
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<220>
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<400>  165

Cys Gly Ala Gly Leu Phe Thr Cys Arg Asn Ser Lys Ile Cys Ile Ser
1               5                   10                  15


Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Asp Asp Asn Ser Asp
            20                  25                  30
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Glu Lys Tyr Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
35 40 45

<210> 166
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 166

Cys Gly Ala Ser Leu Phe Thr Cys Arg Arg Ser Asn Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Met Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
35 40 45

<210> 167
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 167

Cys Gly Ala Gly Leu Phe Thr Cys Arg Ser Thr Lys Ile Cys Ile Ser
1 5 10 15

Gln Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Lys Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
35 40 45

<210> 168
<211> 135
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 168

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1 5 10 15

Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
35 40 45

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
50 55 60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65 70 75 80

Ala Ser Glu Pro Pro Gly Ser Leu Cys Gly Glu Gly Leu Phe Thr Cys
85 90 95

Arg Ser Thr Asn Ile Cys Ile Ser His Ala Trp Val Cys Asp Gly Val
100 105 110

Asp Asp Cys Glu Asp Asn Ser Asp Glu Asn Asn Cys Ser Ala Pro Ala
115 120 125

Ser Glu Pro Pro Gly Ser Leu
130 135

<210> 169
<211> 134
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 169

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


His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Pro Pro Ala His Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
        35                  40                  45


Cys Arg Ala Gly Glu Phe Arg Cys Ser Asn Gly Arg Cys Val Pro Leu
    50                  55                  60


Thr Trp Leu Cys Asp Gly Glu Asp Asp Cys Gln Asp Asn Ser Asp Glu
65                  70                  75                  80


Lys Asn Cys Ala Gln Pro Thr Cys Gly Glu Gly Leu Phe Thr Cys Arg
                85                  90                  95


Ser Thr Asn Ile Cys Ile Ser His Ala Trp Val Cys Asp Gly Val Asp
            100                 105                 110


Asp Cys Glu Asp Asn Ser Asp Glu Asn Asn Cys Ser Ala Pro Ala Ser
        115                 120                 125


Glu Pro Pro Gly Ser Leu
    130


<210>  170
<211>  136
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  170

Cys Ala Pro Gly Glu Phe Thr Cys Lys Asn Thr Gly Arg Cys Ile Pro
1               5                   10                  15


Leu Asn Trp Arg Cys Asp Gly Asp Asp Asp Cys Gly Asp Gly Ser Asp
```

20 25 30

Glu Thr Asp Cys Pro Ala Pro Thr Cys Pro Ser Asn Gln Phe Pro Cys
35 40 45

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

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Pro Ala His Cys Ser Ala
65 70 75 80

Pro Ala Ser Glu Pro Pro Gly Ser Leu Cys Gly Glu Gly Leu Phe Thr
85 90 95

Cys Arg Ser Thr Asn Ile Cys Ile Ser His Ala Trp Val Cys Asp Gly
100 105 110

Val Asp Asp Cys Glu Asp Asn Ser Asp Glu Asn Asn Cys Ser Ala Pro
115 120 125

Ala Ser Glu Pro Pro Gly Ser Leu
130 135

<210> 171
<211> 136
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 171

Cys Gly Pro Asp Glu Phe Arg Cys Asn Asn Gly Gln Cys Ile Pro Leu
1 5 10 15

Pro Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Asn Ser Asp Glu
20 25 30

Pro Leu Glu Ile Cys Gln Ala Pro Thr Cys Gln Ser Asn Glu Phe Arg
35 40 45

```
Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Pro Pro Ala His Cys Ser Ala
65                  70                  75                  80

Pro Ala Ser Glu Pro Pro Gly Ser Leu Cys Gly Glu Gly Leu Phe Thr
                85                  90                  95

Cys Arg Ser Thr Asn Ile Cys Ile Ser His Ala Trp Val Cys Asp Gly
            100                 105                 110

Val Asp Asp Cys Glu Asp Asn Ser Asp Glu Asn Asn Cys Ser Ala Pro
        115                 120                 125

Ala Ser Glu Pro Pro Gly Ser Leu
    130                 135


<210>  172
<211>  230
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  172

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp Cys Gly Ala Asp
130 135 140

Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys
145 150 155 160

Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile
165 170 175

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

Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly
195 200 205

Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro
210 215 220

Pro Gly Ser Leu Ser Leu
225 230

<210> 173
<211> 221
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 173

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                  10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125

Ser Ser Asp Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys
    130                 135                 140

Val Pro Arg Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly
145                 150                 155                 160

Ser Asp Glu Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn
                165                 170                 175

Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys
            180                 185                 190

Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys
        195                 200                 205
```

Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu
210 215 220

<210> 174
<211> 230
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 174

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp Cys Gly Ala Asp
130 135 140

Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys

145 150 155 160

Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile
165 170 175

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

Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly
195 200 205

Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro
210 215 220

Pro Gly Ser Leu Ser Leu
225 230

<210> 175
<211> 230
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 175

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

```
Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110

Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp Cys Gly Ala Asp
    130                 135                 140

Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys
145                 150                 155                 160

Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile
                165                 170                 175

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

Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly
        195                 200                 205

Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro
    210                 215                 220

Pro Gly Ser Leu Ser Leu
225                 230
```

<210> 176
<211> 320
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 176

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
```

```
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp Cys Gly Ala Asp
    130                 135                 140

Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys
145                 150                 155                 160

Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile
                165                 170                 175

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

Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly
        195                 200                 205

Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro
```

210 215 220

Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn
225 230 235 240

Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly Val Asp Asp Cys
245 250 255

Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys
260 265 270

Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln His
275 280 285

Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser
290 295 300

Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu
305 310 315 320

<210> 177
<211> 311
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 177

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

```
Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125

Ser Ser Asp Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys
    130                 135                 140

Val Pro Arg Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly
145                 150                 155                 160

Ser Asp Glu Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn
                165                 170                 175

Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys
            180                 185                 190

Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys
        195                 200                 205

Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Cys Gly Ala
    210                 215                 220

Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg
225                 230                 235                 240

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

Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser
            260                 265                 270
```

```
Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys
        275                 280                 285


Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu
    290                 295                 300


Pro Pro Gly Ser Leu Ser Leu
305                 310


<210>  178
<211>  320
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  178

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
```

```
        115                 120                 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp Cys Gly Ala Asp
    130                 135                 140

Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys
145                 150                 155                 160

Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile
                165                 170                 175

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

Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly
        195                 200                 205

Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro
    210                 215                 220

Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn
225                 230                 235                 240

Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly Val Asp Asp Cys
                245                 250                 255

Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys
            260                 265                 270

Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln His
        275                 280                 285

Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser
    290                 295                 300

Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu
305                 310                 315                 320
```

<210> 179

<211> 320
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 179

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                  10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110


Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp Cys Gly Ala Asp
    130                 135                 140


Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys
145                 150                 155                 160


Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile
                165                 170                 175
```

```
Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly
            180                 185                 190


Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly
        195                 200                 205


Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro
    210                 215                 220


Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn
225                 230                 235                 240


Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly Val Asp Asp Cys
                245                 250                 255


Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys
            260                 265                 270


Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys Ile Pro Gln His
        275                 280                 285


Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser
    290                 295                 300


Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu
305                 310                 315                 320


<210>  180
<211>  230
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  180

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15


Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
```

```
            20                  25                  30

Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65                  70                  75                  80

Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Phe Asn Leu Pro Pro Gly
                85                  90                  95

Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe
            100                 105                 110

Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser
        115                 120                 125

Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val
    130                 135                 140

Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp
145                 150                 155                 160

Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu
                165                 170                 175

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

Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys
        195                 200                 205

Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
    210                 215                 220

Leu Pro Val Ser Ser Asp
```

225 230

<210> 181
<211> 221
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 181

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1 5 10 15

Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
35 40 45

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
50 55 60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65 70 75 80

Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Lys Pro Lys Leu Leu Tyr
85 90 95

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

Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser
115 120 125

Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln
130 135 140

Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro
145 150 155 160

```
Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn
                165                 170                 175


Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu
            180                 185                 190


Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln
        195                 200                 205


Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    210                 215                 220


<210>  182
<211>  230
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  182

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15


Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45


Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60


Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65                  70                  75                  80


Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Phe Asn Leu Pro Pro Gly
                85                  90                  95


Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe
```

100 105 110

Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser
115 120 125

Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val
130 135 140

Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp
145 150 155 160

Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu
165 170 175

Glu Arg Leu Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His
180 185 190

Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys
195 200 205

Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
210 215 220

Leu Pro Val Ser Ser Asp
225 230

<210> 183
<211> 230
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 183

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1 5 10 15

Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

```
Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65                  70                  75                  80

Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Phe Asn Leu Pro Pro Gly
                85                  90                  95

Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe
            100                 105                 110

Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser
        115                 120                 125

Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val
    130                 135                 140

Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp
145                 150                 155                 160

Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu
                165                 170                 175

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

Ala Glu Lys Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Cys Val
        195                 200                 205

Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro
    210                 215                 220

Leu Pro Val Ser Ser Asp
225                 230
```

<210> 184
<211> 320
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 184

```
Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15


Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45


Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60


Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65                  70                  75                  80


Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe
                85                  90                  95


Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly
            100                 105                 110


Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu
        115                 120                 125


Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys
    130                 135                 140


Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly
145                 150                 155                 160


Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly
```

```
                165                 170                 175

Ser Leu Ser Leu Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys
            180                 185                 190

Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp
        195                 200                 205

Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu
    210                 215                 220

Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu
225                 230                 235                 240

Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser
                245                 250                 255

Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn
            260                 265                 270

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

Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His
    290                 295                 300

Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
305                 310                 315                 320


<210>  185
<211>  311
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  185

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15
```

```
Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30

Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65                  70                  75                  80

Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe
                85                  90                  95

Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly
            100                 105                 110

Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu
        115                 120                 125

Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys
    130                 135                 140

Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly
145                 150                 155                 160

Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly
                165                 170                 175

Ser Leu Ser Leu Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His
            180                 185                 190

Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg
        195                 200                 205

Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu
    210                 215                 220
```

```
Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr
225                 230                 235                 240


Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe
                245                 250                 255


Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys
            260                 265                 270


His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys
        275                 280                 285


Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu
    290                 295                 300


Pro Leu Pro Val Ser Ser Asp
305                 310


<210>  186
<211>  320
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  186

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1               5                   10                  15


Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
            20                  25                  30


Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
        35                  40                  45


Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
    50                  55                  60


Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
```

```
65                  70                  75                  80

Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe
                85                  90                  95

Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly
            100                 105                 110

Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu
        115                 120                 125

Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys
    130                 135                 140

Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly
145                 150                 155                 160

Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly
                165                 170                 175

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

Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp
        195                 200                 205

Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu
    210                 215                 220

Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu
225                 230                 235                 240

Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser
                245                 250                 255

Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn
            260                 265                 270

His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe
```

275 280 285

Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His
290 295 300

Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
305 310 315 320

<210> 187
<211> 320
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 187

Cys Gly Ala Asp Gln Phe Arg Cys Gly Asn Gly Ser Cys Val Pro Arg
1 5 10 15

Ala Trp Arg Cys Asp Gly Val Asp Asp Cys Gly Asp Gly Ser Asp Glu
20 25 30

Ala Pro Glu Ile Cys Glu Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg
35 40 45

Cys Arg Ser Gly Arg Cys Ile Pro Gln His Trp Leu Cys Asp Gly Leu
50 55 60

Asn Asp Cys Gly Asp Gly Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro
65 70 75 80

Ala Ser Glu Pro Pro Gly Ser Leu Ser Leu Cys Gly Ala Asp Gln Phe
85 90 95

Arg Cys Gly Asn Gly Ser Cys Val Pro Arg Ala Trp Arg Cys Asp Gly
100 105 110

Val Asp Asp Cys Gly Asp Gly Ser Asp Glu Ala Pro Glu Ile Cys Glu
115 120 125

```
Thr Pro Thr Cys Gln Ser Asn Glu Phe Arg Cys Arg Ser Gly Arg Cys
    130                 135                 140

Ile Pro Gln His Trp Leu Cys Asp Gly Leu Asn Asp Cys Gly Asp Gly
145                 150                 155                 160

Ser Asp Glu Ser Gln Gln Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly
                165                 170                 175

Ser Leu Ser Leu Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys
            180                 185                 190

Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp
        195                 200                 205

Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu
    210                 215                 220

Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu
225                 230                 235                 240

Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser
                245                 250                 255

Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn
            260                 265                 270

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

Val Gly Leu Asp Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His
    290                 295                 300

Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
305                 310                 315                 320
```

<210> 188
<211> 178
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 188

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile
    130                 135                 140


Cys Ile Ser His Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp
145                 150                 155                 160


Asn Ser Asp Glu Asn Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly
                165                 170                 175


Ser Leu
```

<210> 189
<211> 178
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 189

Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

His Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Asn Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu Lys
35 40 45

Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu
50 55 60

Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His Ile
65 70 75 80

Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser
85 90 95

Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr
100 105 110

Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu
115 120 125

Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys Asn
130 135 140

Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg
145 150 155 160

Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val Ser
165 170 175

Ser Asp

<210> 190
<211> 47
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 190

Cys Gly Glu Gly Leu Phe Thr Cys Arg Ser Thr Asn Ile Cys Ile Ser
1 5 10 15

His Ala Trp Val Cys Asp Gly Val Asp Asp Cys Glu Asp Asn Ser Asp
20 25 30

Glu Asn Asn Cys Ser Ala Pro Ala Ser Glu Pro Pro Gly Ser Leu
35 40 45

<210> 191
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 191

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

```
Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 192
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 192

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 193
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 193

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

```
Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  194
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  194

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


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


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
```

115 120 125

Ser Ser Asp
130

<210> 195
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 195

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

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

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Val Val Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 196
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 196

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110


Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 197
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 197

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

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

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 198
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 198

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile

1 5 10 15

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

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Val Val Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 199
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 199

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

```
Gly Thr Val Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  200
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  200

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


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


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
```

50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 201
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 201

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

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

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

```
Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  202
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  202

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Val Asp Arg Ser Asp Gln His
            20                  25                  30


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
```

100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 203
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 203

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Val Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Val Val Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 204
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 204

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

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

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 205

<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 205

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Val Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 206
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 206

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Val Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Asp Gln Asn Gly Ser Val Val Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 207
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 207

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

```
Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110

Gln Asn Gly Ser Val Val Val Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125

Ala Ile Leu Phe Leu Pro Leu Pro Val Ser Ser Asp
    130                 135                 140
```

<210> 208
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 208

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
```

35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Val Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 209
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 209

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

```
Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Val Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  210
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  210

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Val Arg Leu Glu Glu Asn His Val Asn Thr
```

85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 211
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 211

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Val Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 212
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 212

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

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

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Val Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Val Leu Pro Val Ser Ser Asp

130 135 140

<210> 213
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 213

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 214
<211> 131
<212> PRT

<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 214

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1   5   10   15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20   25   30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35   40   45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50   55   60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65   70   75   80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85   90   95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100   105   110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115   120   125

Ser Ser Asp
    130

<210> 215
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 215

```
Lys Pro Val Leu Leu Tyr Thr Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                  10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
            20                  25                  30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Ser Leu Phe Leu Glu Arg Leu
65                  70                  75                  80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95

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

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125

Ser Ser Asp
    130
```

<210> 216
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 216

```
Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly Tyr Phe Leu Arg Ile
1               5                  10                  15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
```

20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys Tyr Ala Glu Lys
85 90 95

Asn Trp Tyr Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 217
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 217

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly Tyr Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

```
Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys Tyr Ala Glu Lys
                85                  90                  95


Asn Trp Tyr Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
    130


<210>  218
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  218

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly Tyr Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

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

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 219
<211> 177
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 219

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

```
Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
            100                 105                 110


Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu
    130                 135                 140


Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp
145                 150                 155                 160


Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala
                165                 170                 175


Ser
```

<210> 220
<211> 183
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 220

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
```

65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Pro Leu Leu Pro Met Val Pro Glu Glu Pro Glu
130 135 140

Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu
145 150 155 160

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

Arg Ser Pro Ser Phe Glu Lys
180

<210> 221
<211> 147
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 221

His Pro Ile Pro Asp Ser Ser Pro Leu Leu Gln Phe Gly Gly Gln Val
1 5 10 15

Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
20 25 30

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
35 40 45

```
Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
    50                  55                  60

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
65                  70                  75                  80

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
                85                  90                  95

Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
            100                 105                 110

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
        115                 120                 125

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
    130                 135                 140

Ser Ser Asp
145
```

<210> 222
<211> 135
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 222

```
Gly Gly Gln Val Lys Pro Lys Leu Leu Tyr Cys Ser Asn Gly Gly His
1               5                   10                  15

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

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

Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr
```

50 55 60

Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe
65 70 75 80

Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr Ile Ser Lys Lys
85 90 95

His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val
100 105 110

Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu
115 120 125

Pro Leu Pro Val Ser Ser Asp
130 135

<210> 223
<211> 177
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 223

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

```
Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


Ala Ile Leu Phe Leu Pro Leu Pro Gly Leu Pro Pro Ala Leu Pro Glu
    130                 135                 140


Pro Pro Gly Ile Leu Ala Pro Gln Pro Pro Asp Val Gly Ser Ser Asp
145                 150                 155                 160


Pro Leu Ser Met Val Gly Pro Ser Gln Gly Arg Ser Pro Ser Tyr Ala
                165                 170                 175


Ser
```

<210> 224
<211> 183
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 224

```
Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
```

50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Phe Leu Pro Leu Leu Pro Met Val Pro Glu Glu Pro Glu
130 135 140

Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu
145 150 155 160

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

Arg Ser Pro Ser Phe Glu Lys
180

<210> 225
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 225

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 226
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 226

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr

50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Cys Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 227
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 227

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

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

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

```
Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn Gly Tyr Val Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Cys Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  228
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  228

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Pro His
            20                  25                  30


Ile Gln Leu Gln Leu Ile Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn Gly Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Cys Lys Arg Gly Pro
```

100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 229
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 229

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Phe Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Thr Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

Ala Ile Leu Trp Leu Pro Leu Pro Val Ser Ser Asp
130 135 140

<210> 230
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 230

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 231

<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 231

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Val Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Val Val Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 232
<211> 131
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 232

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1 5 10 15

Leu Pro Asp Gly Thr Val Asp Gly Thr Arg Asp Arg Ser Asp Gln His
20 25 30

Ile Gln Phe Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
35 40 45

Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
50 55 60

Tyr Gly Ser Gln Thr Pro Asn Glu Glu Thr Leu Phe Leu Glu Arg Leu
65 70 75 80

Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
85 90 95

Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
100 105 110

Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Trp Leu Pro Leu Pro Val
115 120 125

Ser Ser Asp
130

<210> 233
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 233

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1 5 10 15

```
Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  234
<211>  140
<212>  PRT
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<220>
<223>  Synthetic polypeptide

<400>  234

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
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35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65 70 75 80

Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Val Asn Thr
85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
100 105 110

Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 235
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<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 235

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

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Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Val Arg Leu Glu Glu Asn His Tyr Asn Thr
                85                  90                  95


Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Lys
            100                 105                 110


Lys Asn Gly Ser Val Lys Arg Gly Pro Arg Thr His Tyr Gly Gln Lys
        115                 120                 125


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


<210>  236
<211>  140
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  236

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys
1               5                   10                  15


Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
            20                  25                  30


Gly Thr Arg Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
        35                  40                  45


Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
    50                  55                  60


Leu Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn
65                  70                  75                  80


Glu Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr
```

85 90 95

Tyr Ile Ser Lys Lys His Ala Glu Lys Asn Trp Phe Val Gly Leu Asp
100 105 110

Gln Asn Gly Ser Val Val Val Gly Pro Arg Thr His Tyr Gly Gln Lys
115 120 125

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

<210> 237
<211> 140
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic polypeptide

<400> 237

Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys Pro Val Leu Leu Tyr Cys
1 5 10 15

Ser Asn Gly Gly His Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp
20 25 30

Gly Thr Glu Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Ser Ala
35 40 45

Glu Ser Val Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Tyr
50 55 60

Leu Ala Met Asp Thr Asp Phe Asn Leu Pro Pro Gly Asn Tyr Lys Lys
65 70 75 80

Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile Leu
85 90 95

Pro Asp Gly Thr Val Asp Gly Thr Glu Asp Arg Ser Asp Gln His Ile
100 105 110

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Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys Ser
        115                 120                 125


Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp
    130                 135                 140


<210>  238
<211>  131
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic polypeptide

<400>  238

Lys Pro Val Leu Leu Tyr Cys Ser Asn Gly Gly His Phe Leu Arg Ile
1               5                   10                  15


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


Ile Gln Leu Gln Leu Ser Ala Glu Ser Val Gly Glu Val Tyr Ile Lys
        35                  40                  45


Ser Thr Glu Thr Gly Gln Tyr Leu Ala Met Asp Thr Asp Gly Leu Leu
    50                  55                  60


Tyr Gly Ser Gln Thr Pro Asn Glu Glu Cys Leu Phe Leu Glu Arg Leu
65                  70                  75                  80


Glu Glu Asn His Tyr Val Thr Tyr Ile Ser Lys Lys His Ala Glu Lys
                85                  90                  95


Asn Trp Phe Val Gly Leu Lys Lys Asn Gly Ser Val Lys Arg Gly Pro
            100                 105                 110


Arg Thr His Tyr Gly Gln Lys Ala Ile Leu Phe Leu Pro Leu Pro Val
        115                 120                 125


Ser Ser Asp
```