SEQUENCE LISTING

<110> AnaptysBio, Inc.
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<120> ANTIBODIES DIRECTED AGAINST INTERLEUKIN-33 (IL-33)

<130> 719408

<150> US 61/925,946
<151> 2014-01-10

<160> 231

<170> PatentIn version 3.5

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala Glu
50 55 60

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

Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
85 90 95

Tyr Cys Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val

<210> 2
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<400> 2

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
50 55 60

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

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
100 105 110

Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
115 120 125

<210> 3
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<400> 3

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Tyr Ser
20 25 30

Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Ser His Val Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg

<210> 4
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<400> 4

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

```
Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20                  25                  30

Asn Gly Asn Thr Tyr Leu Glu Trp Phe Gln Gln Arg Pro Gly Gln Ser
        35                  40                  45

Pro Arg Arg Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95

Ser His Val Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110

Arg
```

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<223> synthetic sequence

<400> 5

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45
```

```
Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

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<400> 6

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Ser Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
```

```
Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

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<400> 7

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 8
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<220>
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<400> 8

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

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

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<223> synthetic sequence

<400> 9

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe His Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  10
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<400>  10

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45
```

```
Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

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<400> 11

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ala Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80
```

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 12
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<400> 12

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 13
<211> 120
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<220>
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<400> 13

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 14
<211> 120
<212> PRT
<213> Artificial Sequence

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<223> synthetic sequence

<400> 14

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 15
<211> 120
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<220>
<223> synthetic sequence

<400> 15

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Phe
            20                  25                  30
```

```
Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 16
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<400> 16

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser His
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80
```

```
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  17
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<223>  synthetic sequence

<400>  17

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln His Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110
```

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 18
<211> 120
<212> PRT
<213> Artificial Sequence

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<223> synthetic sequence

<400> 18

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1   5   10   15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45

Gly Thr Phe Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50   55   60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100   105   110

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 19
<211> 120
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<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 19

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Leu Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 20
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<400> 20

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30
```

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Asn Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 21
<211> 120
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<400> 21

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Val Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

```
Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  22
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<213>  Artificial Sequence

<220>
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<400>  22

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Asn Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110
```

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 23
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<400> 23

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1   5   10   15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45

Gly Thr Ile Thr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50   55   60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100   105   110

Gly Gln Gly Thr Leu Val Thr Val
        115   120

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<400> 24

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Ile Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

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<223> synthetic sequence

<400> 25

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15
```

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Asn Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 26
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<220>
<223> synthetic sequence

<400> 26

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Arg Phe
50 55 60

```
Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  27
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<400>  27

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Val Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
```

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 28
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<223> synthetic sequence

<400> 28

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Ser Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

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<400> 29

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Asn Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 30
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<400> 30

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15
```

```
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Thr Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 31
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 31

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45
```

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 32
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 32

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 33
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 33

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 34
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 34

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 35
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 35

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  36
<211>  120
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  36

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45
```

```
Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys
                85                  90                  95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 37
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 37

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Ile Val Tyr
65                  70                  75                  80
```

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 38
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 38

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 39
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 39

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Asp Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 40
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 40

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Arg Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 41
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 41

```
Gln Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30
```

```
Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 42
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 42

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
            20                  25                  30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80
```

```
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  43
<211>  120
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  43

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110
```

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 44
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 44

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1   5   10   15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30

Trp Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50   55   60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100   105   110

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 45
<211> 120
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 45

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120
```

<210> 46
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 46

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30
```

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Phe Asn Gln Lys Phe
50 55 60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val
115 120

<210> 47
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 47

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp His Asn Gln Lys Phe
50 55 60

```
Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val
        115                 120


<210>  48
<211>  120
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  48

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1               5                   10                  15


Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45


Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50                  55                  60


Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Thr Tyr
65                  70                  75                  80


Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100                 105                 110
```

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 49
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 49

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1   5   10   15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser His
            20   25   30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45

Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys Phe
    50   55   60

Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Ile Val Tyr
65   70   75   80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
            100   105   110

Gly Gln Gly Thr Leu Val Thr Val
        115   120

<210> 50
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 50

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 51
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 51

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

```
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
            20                  25                  30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Ser Tyr Pro Phe
                85                  90                  95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 52
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 52

```
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
            20                  25                  30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80
```

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Val Asn Ser Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 53
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 53

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ile Asn Ser Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 54
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 54

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Leu Asn Ser Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 55
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 55

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 56
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 56

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Asn Ser Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 57
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 57

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ser Thr Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 58
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 58

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ser Ala Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 59
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 59

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Arg Thr Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 60
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 60

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Arg Ala Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 61
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 61

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Lys Thr Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 62
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 62

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

```
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
            20                  25                  30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ala Ala Tyr Pro Phe
                85                  90                  95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 63
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 63

```
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
            20                  25                  30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45

Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60
```

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Thr Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 64
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 64

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ala Tyr Pro Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 65
<211> 108

<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 65

```
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1               5                  10                  15


Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr Ala
            20                  25                  30


Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45


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


Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80


Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Tyr Ser Tyr Pro Phe
                85                  90                  95


Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 66
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 66

```
Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1               5                  10                  15


Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Tyr
            20                  25                  30
```

```
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Ser Tyr Pro Phe
                85                  90                  95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 67
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 67

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80
```

```
Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 68
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 68

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110
```

```
Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  69
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  69

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


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


Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125
```

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 70
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 70

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Ala
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 71
<211> 139

<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 71

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Asp Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 72
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 72

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Thr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 73
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 73

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

```
Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Asn Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 74
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 74

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45
```

```
Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 75
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 75

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60
```

```
Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  76
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  76

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95
```

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 77
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 77

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 78
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 78

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ala
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 79
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 79

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 80
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 80

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 81
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 81

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


His Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  82
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  82

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30
```

```
Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln His Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  83
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  83

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45
```

```
Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

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

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 84
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 84

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80
```

```
Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Asn Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  85
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  85

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Thr Thr Val
                85                  90                  95
```

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 86
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 86

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Arg Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 87
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 87

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 88
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 88

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe His Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 89
<211> 139
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 89

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Ser Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 90
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 90

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15
```

```
Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  91
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  91

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30
```

```
Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Val Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 92
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 92

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60
```

```
Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  93
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  93

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80
```

```
Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  94
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  94

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110
```

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115   120   125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130   135

<210> 95
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 95

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1   5   10   15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20   25   30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35   40   45

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

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65   70   75   80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85   90   95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100   105   110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115   120   125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 96
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 96

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Asn Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 97
<211> 139

<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 97

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


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


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 98
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 98

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Val Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 99
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 99

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

```
Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Phe Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 100
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 100

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45
```

```
Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Ile Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 101
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 101

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60
```

```
Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Arg
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  102
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  102

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Asn
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95
```

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 103
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 103

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 104
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 104

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Thr
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 105
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 105

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 106
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 106

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 107
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 107

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  108
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  108

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30
```

```
Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 109
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 109

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45
```

```
Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 110
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 110

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp His Asn Gln Lys
65                  70                  75                  80
```

```
Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  111
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  111

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Phe Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95
```

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 112
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 112

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Ile Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 113
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 113

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

His Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Ile Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 114
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 114

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Ile Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 115
<211> 139
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 115

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 116
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 116

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15
```

```
Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  117
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  117

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30
```

```
Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Asp Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 118
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 118

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60
```

```
Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Phe Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  119
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  119

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80
```

```
Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Ala Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  120
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  120

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110
```

```
Cys Ala Arg Pro Leu Tyr Tyr Tyr Gly Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  121
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  121

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Phe
        115                 120                 125
```

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 122
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 122

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Val
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 123
<211> 139

<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 123

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Pro
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 124
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 124

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Phe
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 125
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 125

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

```
Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 126
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 126

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45
```

```
Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  127
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  127

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60
```

```
Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Phe
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  128
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  128

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Ile Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95
```

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 129
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 129

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Ile Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 130
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 130

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 131
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 131

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Phe
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 132
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 132

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Phe
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 133
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 133

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  134
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  134

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30
```

```
Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135
```

<210> 135
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 135

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45
```

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Phe
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 136
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 136

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65 70 75 80

```
Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Phe
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  137
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  137

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95
```

```
Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Phe
        115                 120                 125


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    130                 135


<210>  138
<211>  139
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  138

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
            20                  25                  30


Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
        35                  40                  45


Tyr Trp Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
    50                  55                  60


Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65                  70                  75                  80


Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
                85                  90                  95


Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
            100                 105                 110


Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Leu
        115                 120                 125
```

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 139
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 139

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Phe
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 140
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 140

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asn Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Leu Thr Ser Pro Pro Thr Leu Phe
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 141
<211> 125
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 141

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 142
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 142

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 143
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 143

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

```
Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  144
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  144

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Tyr Pro
            100                 105                 110
```

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115   120   125

<210> 145
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 145

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1   5   10   15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20   25   30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50   55   60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65   70   75   80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85   90   95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Val Asn Ser Tyr Pro
            100   105   110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115   120   125

<210> 146
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 146

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ile Asn Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 147
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 147

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

```
Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Leu Asn Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  148
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  148

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60
```

```
Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  149
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  149

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95
```

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Asn Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 150
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 150

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ser Thr Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 151
<211> 125

<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 151

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ser Ala Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125
```

<210> 152
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 152

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15
```

```
Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Arg Thr Tyr Pro
            100                 105                 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125
```

<210> 153
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 153

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30

Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr
        35                  40                  45
```

```
Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Arg Ala Tyr Pro
            100                 105                 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125
```

<210> 154
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 154

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95
```

```
Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Lys Thr Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  155
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  155

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Lys Ala Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125
```

<210> 156
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 156

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Thr Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 157
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 157

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ala Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  158
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  158

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr
        35                  40                  45
```

```
Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Ser Tyr Pro
            100                 105                 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125
```

<210> 159
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 159

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80
```

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Thr Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 160
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 160

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Phe Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 161
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 161

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Ala Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 162
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 162

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Pro Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 163
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 163

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Thr Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 164
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 164

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala His Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 165
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 165

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Asn Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 166
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 166

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Trp Ala Tyr Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 167
<211> 125
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 167

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125
```

<210> 168
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 168

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30
```

```
Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Gly Thr
        35                  40                  45


Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


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


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  169
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  169

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60
```

```
Ile Tyr Val Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  170
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  170

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Val Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Asn Tyr Pro
            100                 105                 110
```

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115   120   125

<210> 171
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 171

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1   5   10   15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20   25   30

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

Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50   55   60

Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Ser Arg Phe Ser
65   70   75   80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85   90   95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Lys Thr Tyr Pro
            100   105   110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115   120   125

<210> 172
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 172

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
20 25 30

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

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
50 55 60

Ile Tyr Val Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
65 70 75 80

Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
85 90 95

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Asn Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 173
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 173

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

```
Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Val Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Gln Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  174
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  174

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60
```

```
Ile Tyr Val Ala Phe Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95


Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Ser Tyr Pro
            100                 105                 110


Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
        115                 120                 125


<210>  175
<211>  125
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  175

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val
            20                  25                  30


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


Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
    50                  55                  60


Ile Tyr Val Ala Phe Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser
65                  70                  75                  80


Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
                85                  90                  95
```

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Cys Asn Asn Tyr Pro
100 105 110

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg
115 120 125

<210> 176
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 176

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

Met Gly Thr Ile Tyr Pro Arg Asn Ser Asp Thr Asp Tyr Asn Gln Lys
65 70 75 80

Phe Lys Ala Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 177
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 177

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly
20 25 30

Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
35 40 45

Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
50 55 60

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

Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val
85 90 95

Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
100 105 110

Cys Ala Arg Pro Leu Tyr Tyr Tyr Val Thr Ser Pro Pro Thr Leu Leu
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135

<210> 178
<211> 144
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 178

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn
        35                  40                  45


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


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


Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140
```

<210> 179
<211> 144
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 179

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn
        35                  40                  45


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Glu Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


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


Ser Leu Tyr Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140


<210>  180
<211>  144
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  180

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30
```

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


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


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


Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140


<210>  181
<211>  144
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  181

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


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

Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
50 55 60

Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65 70 75 80

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

Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
115 120 125

Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
130 135 140

<210> 182
<211> 144
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 182

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
20 25 30

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

Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
50 55 60

Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65 70 75 80

```
Glu Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Asn
                85                  90                  95


Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Asp Ala Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140


<210>  183
<211>  144
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  183

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


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


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


Glu Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Asn
                85                  90                  95
```

```
Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Asp Ser Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140


<210>  184
<211>  144
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  184

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


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


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


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


Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Gly Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125
```

Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
130 135 140

<210> 185
<211> 144
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 185

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
20 25 30

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

Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
50 55 60

Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65 70 75 80

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

Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Val Arg Ser Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
115 120 125

Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
130 135 140

<210> 186
<211> 144
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 186

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


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


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


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


Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Thr Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140
```

<210> 187
<211> 144
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 187

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15


Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
            20                  25                  30


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


Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
    50                  55                  60


Val Ala Asp Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala
65                  70                  75                  80


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


Ser Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Val Arg Met Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val
        115                 120                 125


Thr Val Ser Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
    130                 135                 140
```

<210> 188
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 188

```
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1               5                  10                  15
```

```
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20                  25                  30


Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45


Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
    50                  55                  60


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


Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Val Arg Asp Gly Pro Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
            100                 105                 110


Ala Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
        115                 120                 125


<210>  189
<211>  113
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  189

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1               5                   10                  15


Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20                  25                  30


Asn Gly Asn Thr Tyr Leu Glu Trp Phe Gln Gln Arg Pro Gly Gln Ser
        35                  40                  45
```

Pro Arg Arg Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Ser His Val Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

Arg

<210> 190
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 190

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

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

Ser Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln
50 55 60

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

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

```
Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln
            100                 105                 110


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


Lys Arg
    130


<210>  191
<211>  130
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  191

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


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


Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35                  40                  45


Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Arg Pro Gly Gln
    50                  55                  60


Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65                  70                  75                  80


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


Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln
            100                 105                 110
```

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

Lys Arg
130

<210> 192
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 192

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 193
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 193

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 194
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 194

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Gln Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 195
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 195

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


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


Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35                  40                  45


Ser Leu Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
    50                  55                  60


Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65                  70                  75                  80


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


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


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


Lys Arg
    130


<210>  196
<211>  130
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  196

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu
            20                  25                  30
```

```
Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35                  40                  45

Ser Ala Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
    50                  55                  60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65                  70                  75                  80

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

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

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

Lys Arg
    130
```

<210> 197
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 197

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35                  40                  45
```

```
Ser Ser Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
    50                  55                  60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65                  70                  75                  80

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

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

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

Lys Arg
    130
```

<210> 198
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 198

```
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35                  40                  45

Ser Glu Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
    50                  55                  60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65                  70                  75                  80
```

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

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

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

Lys Arg
130

<210> 199
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 199

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Thr Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 200
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 200

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Asn Ala Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
    130

<210> 201
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 201

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1   5   10   15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35   40   45

Ser Asn Asp Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
    50   55   60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65   70   75   80

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

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

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

Lys Arg
    130

<210> 202
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 202

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Phe Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 203
<211> 130
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 203

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

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

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

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

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 204
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 204

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

```
Ala Asp Val Leu Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu
            20                  25                  30


Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
        35                  40                  45


Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
    50                  55                  60


Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65                  70                  75                  80


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


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


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


Lys Arg
    130


<210>  205
<211>  130
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  205

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                   10                  15


Ala Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu
            20                  25                  30
```

Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His
35 40 45

Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln
50 55 60

Ser Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val
65 70 75 80

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

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

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

Lys Arg
130

<210> 206
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 206

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1 5 10 15

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

```
Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
65                  70                  75                  80


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


Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150


<210>  207
<211>  153
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  207

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Asn Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
    50                  55                  60
```

```
Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala
65                  70                  75                  80


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


Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Ala Lys Ala Pro Gly Ser Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150
```

<210> 208
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 208

```
Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Ser Tyr Val Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
    50                  55                  60


Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
65                  70                  75                  80
```

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


Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150


<210>  209
<211>  153
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  209

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
    50                  55                  60


Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65                  70                  75                  80
```

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


Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150


<210>  210
<211>  153
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  210

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
    50                  55                  60


Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65                  70                  75                  80


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

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


Tyr Tyr Cys Ala Lys Ala Pro Gly Ser Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150


<210>  211
<211>  153
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  211

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
    50                  55                  60


Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65                  70                  75                  80


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

```
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
            100                 105                 110


Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150
```

<210> 212
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 212

```
Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
    50                  55                  60


Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65                  70                  75                  80


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


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

```
Tyr Tyr Cys Ala Lys Ala Pro Gly Ser Met Val Arg Gly Val Ile Pro
        115                 120                 125


Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
    130                 135                 140


Ser Ala Pro Thr Leu Phe Pro Leu Ala
145                 150


<210>  213
<211>  153
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  synthetic sequence

<400>  213

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1               5                   10                  15


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


Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
        35                  40                  45


Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
    50                  55                  60


Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65                  70                  75                  80


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


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

Tyr Tyr Cys Ala Lys Ala Pro Gly Ser Met Val Arg Gly Val Ile Pro
115 120 125

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
130 135 140

Ser Ala Pro Thr Leu Phe Pro Leu Ala
145 150

<210> 214
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 214

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1 5 10 15

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asn Tyr Val Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
65 70 75 80

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

Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
115 120 125

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
130 135 140

Ser Ala Pro Thr Leu Phe Pro Leu Ala
145 150

<210> 215
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 215

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1 5 10 15

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asn Tyr Val Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
65 70 75 80

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

Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
115 120 125

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
130 135 140

Ser Ala Pro Thr Leu Phe Pro Leu Ala
145 150

<210> 216
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 216

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1 5 10 15

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65 70 75 80

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

Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
115 120 125

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
130 135 140

Ser Ala Pro Thr Leu Phe Pro Leu Ala
145 150

<210> 217
<211> 153
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 217

Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1 5 10 15

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

Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asn Tyr Val Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Arg Asn Lys Tyr Tyr Ala
65 70 75 80

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

Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Lys Ala Pro Gly Pro Met Val Arg Gly Val Ile Pro
115 120 125

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Ser Ala
130 135 140

Ser Ala Pro Thr Leu Phe Pro Leu Ala
145 150

<210> 218
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 218

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 219
<211> 130

<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 219

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

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

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

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

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

Thr His Trp Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 220
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 220

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

Val Arg Ser Ser Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Val
50 55 60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 221
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 221

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

```
Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20                  25                  30

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

Val Arg Ser Ser Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Val
    50                  55                  60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
        115                 120                 125

Lys Arg
    130
```

<210> 222
<211> 147
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 222

```
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1               5                   10                  15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20                  25                  30

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

```
Val Arg Ser Ser Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Val
    50                  55                  60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
        115                 120                 125

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

Glu Gln Leu
145
```

<210> 223
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 223

```
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1               5                   10                  15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20                  25                  30

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

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

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

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

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

Thr His Trp Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 224
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 224

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

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

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

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


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


Thr His Trp Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
        115                 120                 125


Lys Arg
    130
```

<210> 225
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 225

```
Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1               5                   10                  15


Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20                  25                  30


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


Val Arg Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
    50                  55                  60


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


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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 226
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 226

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

Val Arg Ser Ser Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Ala
50 55 60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
    130

<210> 227
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 227

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1   5   10   15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20   25   30

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

Val Ser Ser Ser Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Ala
    50   55   60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
        115   120   125

Lys Arg
    130

<210> 228
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 228

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

Val Ser Ser Ser Tyr Leu Gly Trp Tyr Gln Gln Lys Pro Gly Gln Val
50 55 60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 229
<211> 130
<212> PRT
<213> Artificial Sequence

<220>

<223> synthetic sequence

<400> 229

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
20 25 30

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

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Val
50 55 60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
115 120 125

Lys Arg
130

<210> 230
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic sequence

<400> 230

Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1 5 10 15

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Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20                  25                  30

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

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
    50                  55                  60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
        115                 120                 125

Lys Arg
    130
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<210> 231
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<223> synthetic sequence

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Met Glu Thr Pro Ala Gln Leu Leu Phe Leu Leu Leu Leu Trp Leu Pro
1               5                   10                  15

Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
            20                  25                  30
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Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
        35                  40                  45

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
    50                  55                  60

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

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

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

Thr His Trp Pro Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
        115                 120                 125

Lys Arg
    130
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