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<170> PatentIn version 3.5

<210> 1
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1

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Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1               5                   10                  15


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


Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45


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


Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65                  70                  75                  80


Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85                  90                  95


Lys Val Glu Pro Lys Ser Cys
            100
```

<210> 2
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1   5   10   15

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35   40   45

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr
65   70   75   80

Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85   90   95

Thr Val Glu Arg Lys
            100

<210> 3
<211> 103
<212> PRT
<213> Homo sapiens

<400> 3

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1   5   10   15

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

```
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45


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


Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65                  70                  75                  80


Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85                  90                  95


Arg Val Glu Leu Lys Thr Pro
            100
```

<210> 4
<211> 103
<212> PRT
<213> Homo sapiens

<400> 4

```
Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1               5                   10                  15


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


Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45


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


Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr
65                  70                  75                  80


Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85                  90                  95
```

Arg Val Glu Ser Lys Tyr Gly
            100

<210> 5
<211> 101
<212> PRT
<213> Homo sapiens

<400> 5

Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr
1   5   10   15

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

Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val
        35   40   45

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

Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly
65   70   75   80

Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp
                85   90   95

Val Thr Val Pro Cys
            100

<210> 6
<211> 101
<212> PRT
<213> Homo sapiens

<400> 6

Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Asp Ser Thr
1   5   10   15

Pro Gln Asp Gly Asn Val Val Val Ala Cys Leu Val Gln Gly Phe Phe
            20   25   30

Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Asn Val
        35   40   45

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

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

Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp
                85   90   95

Val Thr Val Pro Cys
            100

<210> 7
<211> 104
<212> PRT
<213> Homo sapiens

<400> 7

Ala Pro Thr Lys Ala Pro Asp Val Phe Pro Ile Ile Ser Gly Cys Arg
1   5   10   15

His Pro Lys Asp Asn Ser Pro Val Val Leu Ala Cys Leu Ile Thr Gly
            20   25   30

Tyr His Pro Thr Ser Val Thr Val Thr Trp Tyr Met Gly Thr Gln Ser
        35   40   45

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

Met Thr Ser Ser Gln Leu Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly
65   70   75   80

Glu Tyr Lys Cys Val Val Gln His Thr Ala Ser Lys Ser Lys Lys Glu
85 90 95

Ile Phe Arg Trp Pro Glu Ser Pro
100

<210> 8
<211> 105
<212> PRT
<213> Hmo sapiens

<400> 8

Ala Ser Thr Gln Ser Pro Ser Val Phe Pro Leu Thr Arg Cys Cys Lys
1 5 10 15

Asn Ile Pro Ser Asn Ala Thr Ser Val Thr Leu Gly Cys Leu Ala Thr
20 25 30

Gly Tyr Phe Pro Glu Pro Val Met Val Thr Trp Asp Thr Gly Ser Leu
35 40 45

Asn Gly Thr Thr Met Thr Leu Pro Ala Thr Thr Leu Thr Leu Ser Gly
50 55 60

His Tyr Ala Thr Ile Ser Leu Leu Thr Val Ser Gly Ala Trp Ala Lys
65 70 75 80

Gln Met Phe Thr Cys Arg Val Ala His Thr Pro Ser Ser Thr Asp Trp
85 90 95

Val Asp Asn Lys Thr Phe Ser Val Cys
100 105

<210> 9
<211> 106
<212> PRT
<213> Homo sapiens

<400> 9

Gly Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu Val Ser Cys Glu Asn
1 5 10 15

Ser Ser Pro Ser Ser Thr Val Ala Val Gly Cys Leu Ala Gln Asp Phe
20 25 30

Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys Tyr Lys Asn Asn Ser Asp
35 40 45

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

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

Thr Asp Glu His Val Val Cys Lys Val Gln His Pro Asn Gly Asn Lys
85 90 95

Glu Lys Asp Val Pro Leu Pro Val Val Ile
100 105

<210> 10
<211> 97
<212> PRT
<213> Homo sapiens

<400> 10

Pro Asn Ile Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser
1 5 10 15

Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Asp Ser Gln
20 25 30

Thr Asn Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys
35 40 45

Thr Val Leu Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val

50 55 60

Ala Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Asn Asn
65 70 75 80

Ser Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Cys
85 90 95

Asp

<210> 11
<211> 130
<212> PRT
<213> Homo sapiens

<400> 11

Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser
1 5 10 15

Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala
20 25 30

Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp Trp Val Asn Gly
35 40 45

Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu
50 55 60

Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg
65 70 75 80

Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln
85 90 95

Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp Arg
100 105 110

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

Asp Cys
    130

<210> 12
<211> 98
<212> PRT
<213> Homo sapiens

<400> 12

Gly Lys Gly Asn Leu Glu Trp Lys Glu Pro Pro Ser Met Arg Leu Lys
1   5   10   15

Ala Arg Pro Ser Ser Pro Gly Phe Ser Val Leu Thr Cys Ser Ala Phe
            20   25   30

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

Ala Ala Gly Thr Gly Gln Gly Asp Phe Gly Pro Asn Ser Asp Gly Ser
    50   55   60

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

Tyr Cys Cys Ile Val Gln His Ala Gly Leu Ala Gln Pro Leu Arg Val
                85   90   95

Glu Leu

<210> 13
<211> 99
<212> PRT
<213> Homo sapiens

<400> 13

```
Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu
1               5                   10                  15

Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro
            20                  25                  30

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

Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu
    50                  55                  60

Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys
65                  70                  75                  80

Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp
                85                  90                  95

Arg Asp Met
```

<210> 14
<211> 101
<212> PRT
<213> Homo sapiens

<400> 14

```
Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr
1               5                   10                  15

His His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu
            20                  25                  30

Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu
        35                  40                  45

Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp
    50                  55                  60
```

```
Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu
65                  70                  75                  80


Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu
                85                  90                  95


Thr Leu Arg Trp Glu
            100
```

<210> 15
<211> 102
<212> PRT
<213> Homo sapiens

<400> 15

```
Asp Ile Glu Thr Leu Gln Arg Ala Asp Pro Pro Lys Thr His Val Thr
1               5                   10                  15


His His Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu
            20                  25                  30


Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu
        35                  40                  45


Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp
    50                  55                  60


Arg Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Glu Glu
65                  70                  75                  80


Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu
                85                  90                  95


Thr Leu Arg Trp Glu Pro
            100
```

<210> 16
<211> 106

<212> PRT
<213> Homo sapiens

<400> 16

Gly Arg Ile Pro Val Ser Arg Gly Phe Pro Ile Ala Glu Val Phe Thr
1   5   10   15

Leu Lys Pro Leu Glu Phe Gly Lys Pro Asn Thr Leu Val Cys Phe Val
            20   25   30

Ser Asn Leu Phe Pro Pro Met Leu Thr Val Asn Trp His Asp His Ser
        35   40   45

Val Pro Val Glu Gly Phe Gly Pro Thr Phe Val Ser Ala Val Asp Gly
    50   55   60

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

Asp Ile Phe Ser Cys Ile Val Thr His Glu Pro Asp Arg Tyr Thr Ala
                85   90   95

Ile Ala Tyr Trp Val Pro Arg Asn Ala Leu
            100   105

<210> 17
<211> 108
<212> PRT
<213> Homo sapiens

<400> 17

Trp Gly Ser Leu Thr Asn Arg Thr Arg Pro Pro Ser Val Gln Val Ala
1   5   10   15

Lys Thr Thr Pro Phe Asn Thr Arg Glu Pro Val Met Leu Ala Cys Tyr
            20   25   30

Val Trp Gly Phe Tyr Pro Ala Glu Val Thr Ile Thr Trp Arg Lys Asn
        35   40   45

```
Gly Lys Leu Val Met His Ser Ser Ala His Lys Thr Ala Gln Pro Asn
    50                  55                  60

Gly Asp Trp Thr Tyr Gln Thr Leu Ser His Leu Ala Leu Thr Pro Ser
65                  70                  75                  80

Tyr Gly Asp Thr Tyr Thr Cys Val Val Glu His Ile Gly Ala Pro Glu
                85                  90                  95

Pro Ile Leu Arg Asp Trp Thr Pro Gly Leu Ser Pro
            100                 105
```

<210> 18
<211> 106
<212> PRT
<213> Homo sapiens

<400> 18

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

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

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
        35                  40                  45

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

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
65                  70                  75                  80

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
                85                  90                  95

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
```

100 105

<210> 19
<211> 106
<212> PRT
<213> Homo sapiens

<400> 19

Gly Gln Pro Lys Ala Asn Pro Thr Val Thr Leu Phe Pro Pro Ser Ser
1 5 10 15

Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
20 25 30

Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro
35 40 45

Val Lys Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn
50 55 60

Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
65 70 75 80

Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val
85 90 95

Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
100 105

<210> 20
<211> 104
<212> PRT
<213> Homo sapiens

<400> 20

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

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr

```
            20                  25                  30

Phe Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Gly Ala Leu Thr Ser
        35                  40                  45

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

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65                  70                  75                  80

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

Lys Ser Val Glu Pro Lys Ser Cys
            100
```

<210> 21
<211> 108
<212> PRT
<213> Homo sapiens

<400> 21

```
Gly Gln Pro Arg Glu Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1               5                   10                  15

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

Tyr Pro Arg Asp Ile Ala Val Glu Trp Glu Val Asp Asn Ala Leu Gln
        35                  40                  45

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

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65                  70                  75                  80
```

```
Lys His Lys Val Tyr Ser Cys Ser Val Met His Glu Ala Leu His Asn
                85                  90                  95


His Tyr Thr Gln Lys Ser Phe Asn Arg Gly Glu Cys
            100                 105


<210>  22
<211>  104
<212>  PRT
<213>  Homo sapiens

<400>  22

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


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


Tyr Pro Ser Asp Val Ala Val Glu Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45


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


Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65                  70                  75                  80


Tyr Ile Cys Asn Val Met His Glu Ala Leu His Asn His Lys Val Asp
                85                  90                  95


Lys Lys Val Glu Pro Lys Ser Cys
            100


<210>  23
<211>  108
<212>  PRT
<213>  Homo sapiens

<400>  23
```

```
Gly Gln Pro Arg Glu Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1               5                   10                  15


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


Tyr Pro Ser Asp Ala Ala Val Glu Trp Lys Val Asp Asn Ala Leu Gln
        35                  40                  45


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


Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65                  70                  75                  80


Lys His Lys Val Tyr Ala Cys Glu Val Met His Glu Ala Leu His Asn
                85                  90                  95


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


<210>  24
<211>  101
<212>  PRT
<213>  Homo sapiens

<400>  24

Gly Gln Pro Arg Glu Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala
1               5                   10                  15


Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe Tyr
            20                  25                  30


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


Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr
    50                  55                  60
```

```
Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala
65                  70                  75                  80


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


Trp Asp Arg Asp Met
            100


<210>  25
<211>  94
<212>  PRT
<213>  Homo sapiens

<400>  25

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


Pro Gly Phe Ser Val Leu Thr Cys Ser Ala Phe Ser Phe Tyr Pro Ser
            20                  25                  30


Asp Leu Ala Leu Glu Phe Leu Arg Asn Gly Leu Ala Ala Gly Thr Gly
        35                  40                  45


Gln Gly Asp Phe Gly Pro Asn Ser Asp Gly Ser Phe His Ala Ser Ser
    50                  55                  60


Ser Leu Thr Val Lys Ser Gly Asp Glu His His Tyr Cys Cys Ile Val
65                  70                  75                  80


Met His Glu Ala Leu His Asn His Pro Leu Arg Val Glu Leu
                85                  90


<210>  26
<211>  97
<212>  PRT
<213>  Homo sapiens

<400>  26
```

```
Gly Gln Pro Arg Glu Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser
1               5                   10                  15


Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Tyr Pro Ser
            20                  25                  30


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


Val Leu Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val Ala
    50                  55                  60


Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Met Phe Glu Ala Leu
65                  70                  75                  80


His Asn His Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser
                85                  90                  95


Cys
```

<210> 27
<211> 115
<212> PRT
<213> Homo sapiens

<400> 27

```
Gly Gln Pro Arg Glu Pro Glu Val Ala Val Phe Glu Pro Ser Glu Ala
1               5                   10                  15


Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala Thr Gly
            20                  25                  30


Phe Tyr Pro Ser Asp Val Ala Leu Glu Trp Trp Val Asn Gly Lys Glu
        35                  40                  45


Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln Pro
    50                  55                  60
```

```
Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser
65                  70                  75                  80


Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln Val Met
                85                  90                  95


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


Ala Asp Cys
        115


<210>  28
<211>  97
<212>  PRT
<213>  Homo sapiens

<400>  28

Ala Ser Thr Lys Gly Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser
1               5                   10                  15


Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Phe Pro Glu
            20                  25                  30


Pro Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys Thr
        35                  40                  45


Val Leu Asp Met Arg Ser Met Asp Tyr Lys Ser Asn Ser Ala Val Ala
    50                  55                  60


Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Lys Pro Ser
65                  70                  75                  80


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


Asp
```

<210> 29
<211> 96
<212> PRT
<213> Homo sapiens

<400> 29

Thr Val Ala Ala Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys
1   5   10   15

Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Tyr Pro Arg Glu
            20   25   30

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

Leu Asp Met Arg Ser Met Asp Tyr Lys Ser Asn Ser Ala Val Ala Trp
    50   55   60

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

Ser Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Cys Asp
                85   90   95

<210> 30
<211> 96
<212> PRT
<213> Homo sapiens

<400> 30

Gly Gln Pro Lys Ala Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp
1   5   10   15

Ser Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Tyr Pro
            20   25   30

Gly Ala Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys

```
        35                  40                  45

Thr Val Leu Asp Met Arg Ser Met Asp Tyr Lys Ser Asn Ser Ala Val
    50                  55                  60

Ala Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Glu Gly
65                  70                  75                  80

Ser Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Cys Asp
                85                  90                  95
```

<210> 31
<211> 114
<212> PRT
<213> Homo sapiens

<400> 31

```
Ala Ser Thr Lys Gly Pro Glu Val Ala Val Phe Glu Pro Ser Glu Ala
1               5                   10                  15

Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala Thr Gly
            20                  25                  30

Phe Phe Pro Glu Pro Val Glu Leu Ser Trp Trp Val Asn Gly Lys Glu
        35                  40                  45

Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln Pro
    50                  55                  60

Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser
65                  70                  75                  80

Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln Val Gln
                85                  90                  95

Phe Lys Pro Ser Asn Thr Ile Val Ser Ala Glu Ala Trp Gly Arg Ala
            100                 105                 110
```

Asp Cys

<210> 32
<211> 113
<212> PRT
<213> Homo sapiens

<400> 32

Thr Val Ala Ala Pro Glu Val Ala Val Phe Glu Pro Ser Glu Ala Glu
1 5 10 15

Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala Thr Gly Phe
20 25 30

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

His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala
50 55 60

Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser Ala
65 70 75 80

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

Gln Gly Leu Ser Ser Ile Val Ser Ala Glu Ala Trp Gly Arg Ala Asp
100 105 110

Cys

<210> 33
<211> 113
<212> PRT
<213> Homo sapiens

<400> 33

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


Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala Thr
            20                  25                  30


Gly Phe Tyr Pro Gly Ala Val Glu Leu Ser Trp Trp Val Asn Gly Lys
        35                  40                  45


Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln
    50                  55                  60


Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val
65                  70                  75                  80


Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln Val
                85                  90                  95


Gln Phe Glu Gly Ser Ile Val Ser Ala Glu Ala Trp Gly Arg Ala Asp
            100                 105                 110


Cys
```

<210> 34
<211> 329
<212> PRT
<213> Homo sapiens

<400> 34

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


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


Tyr Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45
```

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

Lys Ala Arg Val Thr Ile Thr Ala Asp Lys 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 Trp Asp Phe Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
            100                 105                 110

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

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

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
145                 150                 155                 160

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
                165                 170                 175

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
            180                 185                 190

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
        195                 200                 205

Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala
    210                 215                 220

Lys Gly Gln Pro Arg Glu Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
225                 230                 235                 240

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
```

```
                245                 250                 255

Tyr Phe Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Gly Ala Leu Thr
            260                 265                 270

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
        275                 280                 285

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
    290                 295                 300

Thr Tyr Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305                 310                 315                 320

Gln Lys Ser Val Glu Pro Lys Ser Cys
                325
```

<210> 35
<211> 330
<212> PRT
<213> Homo sapiens

<400> 35

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

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

Asn Gly Asn Thr Tyr Leu His Trp Tyr Gln Gln Lys Pro Gly Lys Ala
        35                  40                  45

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

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

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

Thr His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105                 110

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

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
    130                 135                 140

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
145                 150                 155                 160

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
                165                 170                 175

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
            180                 185                 190

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
        195                 200                 205

Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
    210                 215                 220

Pro Arg Glu Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu
225                 230                 235                 240

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

Arg Asp Ile Ala Val Glu Trp Glu Val Asp Asn Ala Leu Gln Ser Gly
            260                 265                 270

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

```
Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His
    290                 295                 300


Lys Val Tyr Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
305                 310                 315                 320


Thr Gln Lys Ser Phe Asn Arg Gly Glu Cys
                325                 330


<210>  36
<211>  468
<212>  PRT
<213>  Homo sapiens

<400>  36

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


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


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


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


Lys Ala Arg Val Thr Ile Thr Ala Asp Lys 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 Trp Asp Phe Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
            100                 105                 110


Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
```

```
        115                 120                 125

Gly Ser Asp Val Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
    130                 135                 140

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Gln Ser Leu Leu
145                 150                 155                 160

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

Lys Ala Pro Lys Leu Leu Ile Tyr Thr Val Ser Asn Arg Phe Ser Gly
            180                 185                 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
        195                 200                 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Ser
    210                 215                 220

Gln Ser Thr His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225                 230                 235                 240

Ile Lys Ala Ala Ala Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
                245                 250                 255

Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
            260                 265                 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
        275                 280                 285

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
    290                 295                 300

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
305                 310                 315                 320
```

```
Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
                325                 330                 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu
            340                 345                 350

Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
        355                 360                 365

Glu Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly
    370                 375                 380

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

Ile Ala Val Glu Trp Glu Ser Gly Ala Leu Thr Ser Gly Val His Thr
                405                 410                 415

Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val
            420                 425                 430

Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ser Cys Ser
        435                 440                 445

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Val Glu
    450                 455                 460

Pro Lys Ser Cys
465
```

<210> 37
<211> 227
<212> PRT
<213> Homo sapiens

<400> 37

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

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

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

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

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

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

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

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

Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val
    130                 135                 140

Val Cys Leu Val Asn Asn Phe Tyr Pro Arg Asp Ile Ala Val Glu Trp
145                 150                 155                 160

Glu Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr
                165                 170                 175

Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr
            180                 185                 190

Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ser Cys Ser Val
        195                 200                 205
```

```
Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Phe Asn Arg
    210                 215                 220


Gly Glu Cys
225
```

<210> 38
<211> 504
<212> PRT
<213> Homo sapiens

<400> 38

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


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


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


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


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


Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Gly Asn Thr Leu Pro Trp
                85                  90                  95


Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Gly Gly Gly Gly
            100                 105                 110


Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Val
        115                 120                 125


Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser
    130                 135                 140
```

```
Cys Lys Ala Ser Gly Gly Thr Phe Ser Gly Tyr Thr Met Asn Trp Val
145                 150                 155                 160


Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Leu Ile Asn Pro
                165                 170                 175


Tyr Lys Gly Val Ser Thr Tyr Asn Gly Lys Phe Lys Asp Arg Val Thr
            180                 185                 190


Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser
        195                 200                 205


Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Tyr
    210                 215                 220


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


Val Thr Val Ser Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
                245                 250                 255


Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro
            260                 265                 270


Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
        275                 280                 285


Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
    290                 295                 300


Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
305                 310                 315                 320


Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
                325                 330                 335


Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
```

```
            340                 345                 350

Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys
        355                 360                 365

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

Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val
385                 390                 395                 400

Cys Leu Val Asn Asn Phe Tyr Pro Arg Asp Ile Ala Val Glu Trp Glu
                405                 410                 415

Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu
            420                 425                 430

Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu
        435                 440                 445

Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ser Cys Ser Val Met
    450                 455                 460

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

Glu Cys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
                485                 490                 495

Ser Gly Thr Gly Gly Ser Gly Gly
            500


<210>  39
<211>  472
<212>  PRT
<213>  Homo sapiens

<400>  39
```

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

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
            20                  25                  30

Arg Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
        35                  40                  45

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Ala
    50                  55                  60

Gln Ser Leu Lys Ser Arg Ile Thr Ile Asn Pro Asp Thr Pro Lys Asn
65                  70                  75                  80

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

Tyr Tyr Cys Ala Arg Asp Gly Gln Leu Gly Leu Asp Ala Leu Asp Ile
            100                 105                 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
        115                 120                 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Gly Leu Thr Gln
    130                 135                 140

Pro Pro Ala Val Ser Val Ala Pro Gly Gln Thr Ala Ser Ile Thr Cys
145                 150                 155                 160

Gly Arg Asp Asn Ile Gly Ser Arg Ser Val His Trp Tyr Gln Gln Lys
                165                 170                 175

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

Ala Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Tyr Glu Asn Thr Ala
        195                 200                 205
```

```
Thr Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr
    210                 215                 220

Cys Gln Val Trp Gly Ile Thr Ser Asp His Val Val Phe Gly Gly Gly
225                 230                 235                 240

Thr Lys Leu Thr Val Leu Ala Ala Ala Asp Lys Thr His Thr Cys Pro
                245                 250                 255

Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro
            260                 265                 270

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
        275                 280                 285

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
    290                 295                 300

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
305                 310                 315                 320

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
                325                 330                 335

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
            340                 345                 350

Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys
        355                 360                 365

Gly Gln Pro Arg Glu Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
    370                 375                 380

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
385                 390                 395                 400
```

```
Phe Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Gly Ala Leu Thr Ser
                405                 410                 415


Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
            420                 425                 430


Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
        435                 440                 445


Tyr Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
    450                 455                 460


Lys Ser Val Glu Pro Lys Ser Cys
465                 470
```

<210> 40
<211> 474
<212> PRT
<213> Homo sapiens

<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 Arg Ser
            20                  25                  30


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


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


Lys 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 Gly Asn Thr Val Val Val Pro Tyr Thr Met Asp Tyr Trp Gly
            100                 105                 110

Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
        115                 120                 125

Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
    130                 135                 140

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg
145                 150                 155                 160

Ala Ser Glu Ser Val Asp Ser Tyr Gly Asn Ser Phe Met His Trp Tyr
                165                 170                 175

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Leu Ala Ser
            180                 185                 190

Asn Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
        195                 200                 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
    210                 215                 220

Thr Tyr Tyr Cys Gln Gln Asn Asn Glu Asp Pro Leu Thr Phe Gly Gly
225                 230                 235                 240

Gly Thr Lys Val Glu Ile Lys Arg Ala Ala Ala Asp Lys Thr His Thr
                245                 250                 255

Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu
            260                 265                 270

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
        275                 280                 285

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
```

```
    290                 295                 300

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
305                 310                 315                 320

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
                325                 330                 335

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
            340                 345                 350

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

Ala Lys Gly Gln Pro Arg Glu Pro Ser Val Phe Pro Leu Ala Pro Ser
    370                 375                 380

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys
385                 390                 395                 400

Asp Tyr Phe Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Gly Ala Leu
                405                 410                 415

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
            420                 425                 430

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr
        435                 440                 445

Gln Thr Tyr Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
    450                 455                 460

Thr Gln Lys Ser Val Glu Pro Lys Ser Cys
465                 470
```

<210> 41
<211> 333
<212> PRT

<213> Homo sapiens

<400> 41

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


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


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


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


Lys Ala Arg Val Thr Ile Thr Ala Asp Lys 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 Trp Asp Phe Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
            100                 105                 110


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


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


Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
145                 150                 155                 160


Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
                165                 170                 175


Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
            180                 185                 190
```

```
Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
        195                 200                 205

Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala
    210                 215                 220

Lys Gly Gln Pro Arg Glu Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
225                 230                 235                 240

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Val Asn Asn
                245                 250                 255

Phe Tyr Pro Arg Asp Ile Ala Val Glu Trp Glu Val Asp Asn Ala Leu
            260                 265                 270

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
        275                 280                 285

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
    290                 295                 300

Glu Lys His Lys Val Tyr Ser Cys Ser Val Met His Glu Ala Leu His
305                 310                 315                 320

Asn His Tyr Thr Gln Lys Ser Phe Asn Arg Gly Glu Cys
                325                 330
```

<210> 42
<211> 326
<212> PRT
<213> Homo sapiens

<400> 42

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

Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Gln Ser Leu Leu His Ser
```

```
            20                  25                  30

Asn Gly Asn Thr Tyr Leu His Trp Tyr Gln Gln Lys Pro Gly Lys Ala
        35                  40                  45

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

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

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

Thr His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105                 110

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

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
    130                 135                 140

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
145                 150                 155                 160

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
                165                 170                 175

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
            180                 185                 190

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
        195                 200                 205

Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
    210                 215                 220
```

```
Pro Arg Glu Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
225                 230                 235                 240


Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
                245                 250                 255


Ser Asp Ile Ala Val Glu Trp Glu Ser Gly Ala Leu Thr Ser Gly Val
            260                 265                 270


His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
        275                 280                 285


Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ser
    290                 295                 300


Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
305                 310                 315                 320


Val Glu Pro Lys Ser Cys
                325


<210>  43
<211>  599
<212>  PRT
<213>  Homo sapiens

<400>  43

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


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


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


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

```
Lys Asp Arg Val Thr Ile Thr Ala Asp Lys 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 Ser Gly Tyr Tyr Gly Asp Ser Asp Trp Tyr Phe Asp Val Trp
            100                 105                 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Thr Gly Gly Gly Ser
        115                 120                 125

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
    130                 135                 140

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
145                 150                 155                 160

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
                165                 170                 175

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
            180                 185                 190

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
        195                 200                 205

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile
    210                 215                 220

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Ser Val
225                 230                 235                 240

Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser
                245                 250                 255
```

```
Val Val Cys Leu Val Asn Asn Phe Tyr Pro Arg Asp Ile Ala Val Glu
            260                 265                 270

Trp Glu Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val
        275                 280                 285

Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu
    290                 295                 300

Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ser Cys Ser
305                 310                 315                 320

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Phe Asn
                325                 330                 335

Arg Gly Glu Cys Asp Lys Thr His Thr Ala Pro Ala Pro Pro Val Ala
            340                 345                 350

Gly Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser
        355                 360                 365

Gln Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser
    370                 375                 380

Asn Arg Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu
385                 390                 395                 400

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

Ala Gln Ser Leu Lys Ser Arg Ile Thr Ile Asn Pro Asp Thr Pro Lys
            420                 425                 430

Asn Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala
        435                 440                 445

Val Tyr Tyr Cys Ala Arg Asp Gly Gln Leu Gly Leu Asp Ala Leu Asp
    450                 455                 460
```

```
Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
465                 470                 475                 480


Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Gly Leu Thr
                485                 490                 495


Gln Pro Pro Ala Val Ser Val Ala Pro Gly Gln Thr Ala Ser Ile Thr
            500                 505                 510


Cys Gly Arg Asp Asn Ile Gly Ser Arg Ser Val His Trp Tyr Gln Gln
        515                 520                 525


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


Pro Ala Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Tyr Glu Asn Thr
545                 550                 555                 560


Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala Asp Tyr
                565                 570                 575


Tyr Cys Gln Val Trp Gly Ile Thr Ser Asp His Val Val Phe Gly Gly
            580                 585                 590


Gly Thr Lys Leu Thr Val Leu
        595
```

<210> 44
<211> 580
<212> PRT
<213> Homo sapiens

<400> 44

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


Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Arg Asn Tyr
```

```
            20                  25                  30

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

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

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

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Gly Asn Thr Leu Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Thr Gly Gly Gly
            100                 105                 110

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

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
    130                 135                 140

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
145                 150                 155                 160

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
                165                 170                 175

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

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser
        195                 200                 205

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Ser
    210                 215                 220
```

```
Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
225                 230                 235                 240

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Ser Asp Ile Ala Val
                245                 250                 255

Glu Trp Glu Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
            260                 265                 270

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
        275                 280                 285

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ser Cys Ser Val Met His
    290                 295                 300

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Val Glu Pro Lys Ser
305                 310                 315                 320

Cys Asp Lys Thr His Thr Ala Pro Ala Pro Pro Val Ala Gly Gln Val
                325                 330                 335

Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu
            340                 345                 350

Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Arg Ala
        355                 360                 365

Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu
    370                 375                 380

Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Ala Gln Ser
385                 390                 395                 400

Leu Lys Ser Arg Ile Thr Ile Asn Pro Asp Thr Pro Lys Asn Gln Phe
                405                 410                 415

Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr
```

```
            420                 425                 430

Cys Ala Arg Asp Gly Gln Leu Gly Leu Asp Ala Leu Asp Ile Trp Gly
        435                 440                 445

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
    450                 455                 460

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Gly Leu Thr Gln Pro Pro
465                 470                 475                 480

Ala Val Ser Val Ala Pro Gly Gln Thr Ala Ser Ile Thr Cys Gly Arg
                485                 490                 495

Asp Asn Ile Gly Ser Arg Ser Val His Trp Tyr Gln Gln Lys Pro Gly
            500                 505                 510

Gln Ala Pro Val Leu Val Val Tyr Asp Asp Ser Asp Arg Pro Ala Gly
        515                 520                 525

Ile Pro Glu Arg Phe Ser Gly Ser Asn Tyr Glu Asn Thr Ala Thr Leu
    530                 535                 540

Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Gln
545                 550                 555                 560

Val Trp Gly Ile Thr Ser Asp His Val Val Phe Gly Gly Gly Thr Lys
                565                 570                 575

Leu Thr Val Leu
            580
```

<210> 45
<211> 107
<212> PRT
<213> Homo sapiens

<400> 45

```
Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
1               5                   10                  15


Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
            20                  25                  30


Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
        35                  40                  45


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


Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65                  70                  75                  80


Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
                85                  90                  95


Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
            100                 105


<210>  46
<211>  107
<212>  PRT
<213>  Homo sapiens

<400>  46

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
1               5                   10                  15


Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
            20                  25                  30


Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
        35                  40                  45


Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe
    50                  55                  60
```

```
Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65                  70                  75                  80


Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
                85                  90                  95


Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
            100                 105


<210>  47
<211>  107
<212>  PRT
<213>  Homo sapiens

<400>  47

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
1               5                   10                  15


Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
            20                  25                  30


Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Ser Gly Gln Pro Glu
        35                  40                  45


Asn Asn Tyr Asn Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe
    50                  55                  60


Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65                  70                  75                  80


Asn Ile Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe
                85                  90                  95


Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
            100                 105


<210>  48
<211>  107
```

<212> PRT
<213> Homo sapiens

<400> 48

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu
1   5   10   15

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
            20   25   30

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
        35   40   45

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

Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly
65   70   75   80

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
                85   90   95

Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
            100   105

<210> 49
<211> 112
<212> PRT
<213> Homo sapiens

<400> 49

Val Ala Leu His Arg Pro Asp Val Tyr Leu Leu Pro Pro Ala Arg Glu
1   5   10   15

Gln Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val Thr Gly
            20   25   30

Phe Ser Pro Ala Asp Val Phe Val Gln Trp Met Gln Arg Gly Gln Pro
        35   40   45

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

Ala Pro Gly Arg Tyr Phe Ala His Ser Ile Leu Thr Val Ser Glu Glu
65   70   75   80

Glu Trp Asn Thr Gly Glu Thr Tyr Thr Cys Val Val Ala His Glu Ala
                85   90   95

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

<210> 50
<211> 113
<212> PRT
<213> Homo sapiens

<400> 50

Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu
1   5   10   15

Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly
            20   25   30

Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu
        35   40   45

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

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

Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu
                85   90   95

Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly

100 105 110

Lys

<210> 51
<211> 113
<212> PRT
<213> Homo sapiens

<400> 51

Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu
1 5 10 15

Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly
20 25 30

Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu
35 40 45

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

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

Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu
85 90 95

Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly
100 105 110

Lys

<210> 52
<211> 112
<212> PRT
<213> Homo sapiens

<400> 52

Val Pro Ala Gln Ala Pro Val Lys Leu Ser Leu Asn Leu Leu Ala Ser
1 5 10 15

Ser Asp Pro Pro Glu Ala Ala Ser Trp Leu Leu Cys Glu Val Ser Gly
20 25 30

Phe Ser Pro Pro Asn Ile Leu Leu Met Trp Leu Glu Asp Gln Arg Glu
35 40 45

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

Ser Thr Thr Phe Trp Ala Trp Ser Val Leu Arg Val Pro Ala Pro Pro
65 70 75 80

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

Arg Thr Leu Leu Asn Ala Ser Arg Ser Leu Glu Val Ser Tyr Val Thr
100 105 110

<210> 53
<211> 110
<212> PRT
<213> Homo sapiens

<400> 53

Gly Pro Arg Ala Ala Pro Glu Val Tyr Ala Phe Ala Thr Pro Glu Trp
1 5 10 15

Pro Gly Ser Arg Asp Lys Arg Thr Leu Ala Cys Leu Ile Gln Asn Phe
20 25 30

Met Pro Glu Asp Ile Ser Val Gln Trp Leu His Asn Glu Val Gln Leu
35 40 45

```
Pro Asp Ala Arg His Ser Thr Thr Gln Pro Arg Lys Thr Lys Gly Ser
    50                  55                  60

Gly Phe Phe Val Phe Ser Arg Leu Glu Val Thr Arg Ala Glu Trp Glu
65                  70                  75                  80

Gln Lys Asp Glu Phe Ile Cys Arg Ala Val His Glu Ala Ala Ser Pro
                85                  90                  95

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

<210> 54
<211> 106
<212> PRT
<213> Homo sapiens

<400> 54

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

Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
            20                  25                  30

Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro
        35                  40                  45

Val Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn
    50                  55                  60

Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
65                  70                  75                  80

Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val
                85                  90                  95

Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
            100                 105
```

<210> 55
<211> 106
<212> PRT
<213> Homo sapiens

<400> 55

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

Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
            20   25   30

Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro
        35   40   45

Ala Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn
    50   55   60

Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
65   70   75   80

Ser His Lys Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val
                85   90   95

Glu Lys Thr Val Ala Pro Thr Glu Cys Ser
            100   105

<210> 56
<211> 106
<212> PRT
<213> Homo sapiens

<400> 56

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

Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
            20   25   30

```
Phe Tyr Pro Gly Ala Val Lys Val Ala Trp Lys Ala Asp Gly Ser Pro
        35                  40                  45

Val Asn Thr Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn
    50                  55                  60

Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
65                  70                  75                  80

Ser His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val
                85                  90                  95

Glu Lys Thr Val Ala Pro Ala Glu Cys Ser
            100                 105
```

<210> 57
<211> 106
<212> PRT
<213> Homo sapiens

<400> 57

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

Glu Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Val Ser Asp
            20                  25                  30

Phe Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro
        35                  40                  45

Val Lys Val Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn
    50                  55                  60

Lys Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys
65                  70                  75                  80

Ser His Arg Ser Tyr Ser Cys Arg Val Thr His Glu Gly Ser Thr Val
                85                  90                  95
```

```
Glu Lys Thr Val Ala Pro Ala Glu Cys Ser
            100                 105


<210>  58
<211>  131
<212>  PRT
<213>  Homo sapiens

<400>  58

Glu Asp Leu Asn Lys Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro
1               5                   10                  15


Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu
            20                  25                  30


Ala Thr Gly Phe Phe Pro Asp His Val Glu Leu Ser Trp Trp Val Asn
        35                  40                  45


Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys
    50                  55                  60


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


Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys
                85                  90                  95


Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp
            100                 105                 110


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


Ala Asp Cys
    130


<210>  59
```

<211> 113
<212> PRT
<213> Homo sapiens

<400> 59

Trp Gly Ser Leu Thr Asn Arg Thr Arg Pro Pro Ser Val Gln Val Ala
1 5 10 15

Lys Thr Thr Pro Phe Asn Thr Arg Glu Pro Val Met Leu Ala Cys Tyr
20 25 30

Val Trp Gly Phe Tyr Pro Ala Glu Val Thr Ile Thr Trp Arg Lys Asn
35 40 45

Gly Lys Leu Val Met His Ser Ser Ala His Lys Thr Ala Gln Pro Asn
50 55 60

Gly Asp Trp Thr Tyr Gln Thr Leu Ser His Leu Ala Leu Thr Pro Ser
65 70 75 80

Tyr Gly Asp Thr Tyr Thr Cys Val Val Glu His Ile Gly Ala Pro Glu
85 90 95

Pro Ile Leu Arg Asp Trp Thr Pro Gly Leu Ser Pro Met Gln Thr Leu
100 105 110

Lys