SEQUENCE LISTING

<110> Cue Biopharma, Inc.
Seidel, Ronald D III
Chaparro, Rodolfo J

<120> T-Cell Modulatory Polypeptides and Methods of Use Thereof

<130> CUEB-107WO

<160> 100

<170> PatentIn version 3.5

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<213> Homo sapiens

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

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

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

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

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

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

115 120 125

Ile Ser Thr Leu Thr
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<210> 14
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<213> Homo sapiens

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1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Gln
20 25 30

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

Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly Glu Thr
50 55 60

Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu Gly Thr
65 70 75 80

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Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly Ser His Thr Val Gln
                85                  90                  95

Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu Arg Gly
            100                 105                 110

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

Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr Thr Lys
    130                 135                 140

His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala Tyr Leu
145                 150                 155                 160

Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
                165                 170                 175

Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr His His
            180                 185                 190

Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe
        195                 200                 205

Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
    210                 215                 220

Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr
225                 230                 235                 240

Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln Arg
                245                 250                 255

Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu
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Arg Trp Glu Pro
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Leu Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Gln
            20   25   30

Phe Val Arg Phe Asp Ser Asp Ala Asp Asn Pro Arg Phe Glu Pro Arg
        35   40   45

Ala Pro Trp Met Glu Gln Glu Gly Pro Glu Tyr Trp Glu Glu Gln Thr
    50   55   60

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

Ala Gln Arg Tyr Tyr Asn Gln Ser Lys Gly Gly Ser His Thr Phe Gln
                85   90   95

Arg Met Phe Gly Cys Asp Val Gly Ser Asp Trp Arg Leu Leu Arg Gly
            100   105   110

Tyr Gln Gln Phe Ala Tyr Asp Gly Arg Asp Tyr Ile Ala Leu Asn Glu
        115   120   125

Asp Leu Lys Thr Trp Thr Ala Ala Asp Thr Ala Ala Leu Ile Thr Arg
    130   135   140

Arg Lys Trp Glu Gln Ala Gly Asp Ala Glu Tyr Tyr Arg Ala Tyr Leu
145   150   155   160

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Glu Gly Glu Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Leu Gly Asn
                165                 170                 175

Glu Thr Leu Leu Arg Thr Asp Ser Pro Lys Ala His Val Thr Tyr His
            180                 185                 190

Pro Arg Ser Gln Val Asp Val Thr Leu Arg Cys Trp Ala Leu Gly Phe
        195                 200                 205

Tyr Pro Ala Asp Ile Thr Leu Thr Trp Gln Leu Asn Gly Glu Asp Leu
    210                 215                 220

Thr Gln Asp Met Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr
225                 230                 235                 240

Phe Gln Lys Trp Ala Ala Val Val Val Pro Leu Gly Lys Glu Gln Asn
                245                 250                 255

Tyr Thr Cys His Val His His Lys Gly Leu Pro Glu Pro Leu Thr Leu
            260                 265                 270

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Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu
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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
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<400> 17

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


Arg Asp Met
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<210> 18
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<213> Homo sapiens

<400> 18

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            20                  25                  30


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


Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly Glu Thr
    50                  55                  60


Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu Gly Thr
65                  70                  75                  80


Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly Ser His Thr Val Gln
                85                  90                  95


Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu Arg Gly
            100                 105                 110


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


Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr Thr Lys
    130                 135                 140
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His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala Tyr Leu
145                 150                 155                 160


Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
                165                 170                 175


Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr His His
            180                 185                 190


Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe
        195                 200                 205


Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
    210                 215                 220


Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Cys Gly Asp Gly Thr
225                 230                 235                 240


Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln Arg
                245                 250                 255


Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu
            260                 265                 270


Arg Trp Glu Pro
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<210>  19
<211>  275
<212>  PRT
<213>  Homo sapiens

<400>  19

Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg Pro Gly
1               5                   10                  15


Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Gln
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            20                  25                  30

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

Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly Glu Thr
    50                  55                  60

Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu Gly Thr
65                  70                  75                  80

Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala Gly Ser His Thr Val Gln
                85                  90                  95

Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu Arg Gly
            100                 105                 110

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

Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr Thr Lys
    130                 135                 140

His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala Tyr Leu
145                 150                 155                 160

Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
                165                 170                 175

Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr His His
            180                 185                 190

Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe
        195                 200                 205

Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
    210                 215                 220
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Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Cys Gly Asp Gly Thr
225 230 235 240

Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln Arg
245 250 255

Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu
260 265 270

Arg Trp Glu
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Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
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<400> 21

Asp Tyr Lys Asp Asp Asp Asp Lys
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<210> 22
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<400> 23

His His His His His
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His His His His His His
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Arg Tyr Ile Arg Ser
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<220>
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Trp Glu Ala Ala Ala Arg Glu Ala Cys Cys Arg Glu Cys Cys Ala Arg
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Ala

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Ala Ala Ala Gly Gly
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<210> 29
<211> 8
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<400> 29

Leu Glu Val Leu Phe Gln Gly Pro
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<400> 30

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1 5

<210> 31
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Asp Asp Asp Asp Lys
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<400> 32

Leu Val Pro Arg

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<210> 33
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Gly Ser Gly Ala Thr Asn Phe Ser Leu Leu Lys Gln Ala Gly Asp Val
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Glu Glu Asn Pro Gly Pro
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Gly Ser Gly Glu Gly Arg Gly Ser Leu Leu Thr Cys Gly Asp Val Glu
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Glu Asn Pro Gly Pro
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<210> 35
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<212> PRT
<213> Artificial sequence

<220>
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Gly Ser Gly Gln Cys Thr Asn Tyr Ala Leu Leu Lys Leu Ala Gly Asp

1 5 10 15

Val Glu Ser Asn Pro Gly Pro
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<223> Synthetic Polypeptide Sequence

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1 5 10 15

Gly Asp Val Glu Ser Asn Pro Gly Pro
20 25

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
130

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


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


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


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


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


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


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


Ile Ser Thr Leu Thr
    130


<210>  40
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1               5                   10                  15

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130
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1 5 10 15

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
130

<210> 42
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<213> Homo sapiens

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<400> 42

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1 5 10 15

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130
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<210> 43
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<400> 43

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1               5                   10                  15
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Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
            20   25   30

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130

<210> 44
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<220>
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<223> Xaa is an amino acid other than a phenylalanine

<400> 44

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1               5                   10                  15


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


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


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


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


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


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


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


Ile Ser Thr Leu Thr
    130


<210>  45
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<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<400> 45

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

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130

<210> 46
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<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<400> 46

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


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


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


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


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


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


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


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


Ile Ser Thr Leu Thr
    130
```

<210> 47
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa is an amino acid other than a histidine

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Xaa is an amino acid other than an aspartic acid

<220>
<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<400> 47

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

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130

<210> 48
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Xaa is an amino acid other than an aspartic acid

<220>
<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<220>
<221> MISC_FEATURE
<222> (126)..(126)
<223> Xaa is an amino acid other than a glutamine

<400> 48

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

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
130

<210> 49
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Xaa is an amino acid other than an aspartic acid

<220>
<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<220>
<221> MISC_FEATURE
<222> (45)..(45)
<223> Xaa is an amino acid other than a tyrosine

<400> 49

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

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

Asn Pro Lys Leu Thr Arg Met Leu Thr Xaa Lys Phe Xaa Met Pro Lys

```
        35                  40                  45

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

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

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

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

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

Ile Ser Thr Leu Thr
    130


<210>  50
<211>  133
<212>  PRT
<213>  Homo sapiens


<220>
<221>  MISC_FEATURE
<222>  (16)..(16)
<223>  Xaa is an amino acid other than a histidine

<220>
<221>  MISC_FEATURE
<222>  (20)..(20)
<223>  Xaa is an amino acid other than an aspartic acid

<220>
<221>  MISC_FEATURE
<222>  (42)..(42)
<223>  Xaa is an amino acid other than a phenylalanine

<220>
<221>  MISC_FEATURE
```

<222> (45)..(45)
<223> Xaa is an amino acid other than a tyrosine

<400> 50

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

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130

<210> 51
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (20)..(20)

<223> Xaa is an amino acid other than an aspartic acid

<220>
<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<220>
<221> MISC_FEATURE
<222> (45)..(45)
<223> Xaa is an amino acid other than a tyrosine

<220>
<221> MISC_FEATURE
<222> (126)..(126)
<223> Xaa is an amino acid other than a glutamine

<400> 51

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


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


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


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


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


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


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


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

Ile Ser Thr Leu Thr
130

<210> 52
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa is an amino acid other than a histidine

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Xaa is an amino acid other than an aspartic acid

<220>
<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<220>
<221> MISC_FEATURE
<222> (45)..(45)
<223> Xaa is an amino acid other than a tyrosine

<220>
<221> MISC_FEATURE
<222> (126)..(126)
<223> Xaa is an amino acid other than a glutamine

<400> 52

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

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130
```

<210> 53
<211> 133
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa is an amino acid other than a histidine

<220>
<221> MISC_FEATURE
<222> (42)..(42)
<223> Xaa is an amino acid other than a phenylalanine

<220>
<221> MISC_FEATURE
<222> (126)..(126)
<223> Xaa is an amino acid other than a glutamine

<400> 53

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

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

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

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

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

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

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

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

Ile Ser Thr Leu Thr
    130
```

<210> 54
<211> 272
<212> PRT
<213> Homo sapiens

<400> 54

```
Met Asp Ser Tyr Leu Leu Met Trp Gly Leu Leu Thr Phe Ile Met Val
1               5                   10                  15

Pro Gly Cys Gln Ala Glu Leu Cys Asp Asp Asp Pro Pro Glu Ile Pro
            20                  25                  30

His Ala Thr Phe Lys Ala Met Ala Tyr Lys Glu Gly Thr Met Leu Asn
        35                  40                  45
```

```
Cys Glu Cys Lys Arg Gly Phe Arg Arg Ile Lys Ser Gly Ser Leu Tyr
    50                  55                  60

Met Leu Cys Thr Gly Asn Ser Ser His Ser Ser Trp Asp Asn Gln Cys
65                  70                  75                  80

Gln Cys Thr Ser Ser Ala Thr Arg Asn Thr Thr Lys Gln Val Thr Pro
                85                  90                  95

Gln Pro Glu Glu Gln Lys Glu Arg Lys Thr Thr Glu Met Gln Ser Pro
            100                 105                 110

Met Gln Pro Val Asp Gln Ala Ser Leu Pro Gly His Cys Arg Glu Pro
        115                 120                 125

Pro Pro Trp Glu Asn Glu Ala Thr Glu Arg Ile Tyr His Phe Val Val
    130                 135                 140

Gly Gln Met Val Tyr Tyr Gln Cys Val Gln Gly Tyr Arg Ala Leu His
145                 150                 155                 160

Arg Gly Pro Ala Glu Ser Val Cys Lys Met Thr His Gly Lys Thr Arg
                165                 170                 175

Trp Thr Gln Pro Gln Leu Ile Cys Thr Gly Glu Met Glu Thr Ser Gln
            180                 185                 190

Phe Pro Gly Glu Glu Lys Pro Gln Ala Ser Pro Glu Gly Arg Pro Glu
        195                 200                 205

Ser Glu Thr Ser Cys Leu Val Thr Thr Thr Asp Phe Gln Ile Gln Thr
    210                 215                 220

Glu Met Ala Ala Thr Met Glu Thr Ser Ile Phe Thr Thr Glu Tyr Gln
225                 230                 235                 240
```

```
Val Ala Val Ala Gly Cys Val Phe Leu Leu Ile Ser Val Leu Leu Leu
                245                 250                 255


Ser Gly Leu Thr Trp Gln Arg Arg Gln Arg Lys Ser Arg Arg Thr Ile
            260                 265                 270
```

<210> 55
<211> 491
<212> PRT
<213> Homo sapiens

<400> 55

```
Met Ala Ala Pro Ala Leu Ser Trp Arg Leu Pro Leu Leu Ile Leu Leu
1               5                   10                  15


Leu Pro Leu Ala Thr Ser Trp Ala Ser Ala Ala Val Asn Gly Thr Ser
            20                  25                  30


Gln Phe Thr Cys Phe Tyr Asn Ser Arg Ala Asn Ile Ser Cys Val Trp
        35                  40                  45


Ser Gln Asp Gly Ala Leu Gln Asp Thr Ser Cys Gln Val His Ala Trp
    50                  55                  60


Pro Asp Arg Arg Arg Trp Asn Gln Thr Cys Glu Leu Leu Pro Val Ser
65                  70                  75                  80


Gln Ala Ser Trp Ala Cys Asn Leu Ile Leu Gly Ala Pro Asp Ser Gln
                85                  90                  95


Lys Leu Thr Thr Val Asp Ile Val Thr Leu Arg Val Leu Cys Arg Glu
            100                 105                 110


Gly Val Arg Trp Arg Val Met Ala Ala Pro Leu Leu Thr Leu Lys Gln
        115                 120                 125


Lys Gln Glu Trp Ile Cys Leu Glu Thr Leu Thr Pro Asp Thr Gln Tyr
    130                 135                 140
```

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

Ser Pro Trp Ser Gln Pro Leu Ala Phe Arg Thr Lys Pro Ala Ala Leu
                165                 170                 175

Gly Lys Asp Thr Ile Pro Trp Leu Gly His Leu Leu Val Gly Leu Ser
            180                 185                 190

Gly Ala Phe Gly Phe Ile Ile Leu Val Tyr Leu Leu Ile Asn Cys Arg
        195                 200                 205

Asn Thr Gly Pro Trp Leu Lys Lys Val Leu Lys Cys Asn Thr Pro Asp
    210                 215                 220

Pro Ser Lys Phe Phe Ser Gln Leu Ser Ser Glu His Gly Gly Asp Val
225                 230                 235                 240

Gln Lys Trp Leu Ser Ser Pro Phe Pro Ser Ser Ser Phe Ser Pro Gly
                245                 250                 255

Gly Leu Ala Pro Glu Ile Ser Pro Leu Glu Val Leu Glu Arg Asp Lys
            260                 265                 270

Val Thr Gln Leu Leu Leu Gln Gln Asp Lys Val Pro Glu Pro Ala Ser
        275                 280                 285

Leu Ser Ser Asn His Ser Leu Thr Ser Cys Phe Thr Asn Gln Gly Tyr
    290                 295                 300

Phe Phe Phe His Leu Pro Asp Ala Leu Glu Ile Glu Ala Cys Gln Val
305                 310                 315                 320

Tyr Phe Thr Tyr Asp Pro Tyr Ser Glu Glu Asp Pro Asp Glu Gly Val
                325                 330                 335

Ala Gly Ala Pro Thr Gly Ser Ser Pro Gln Pro Leu Gln Pro Leu Ser
```

```
            340                 345                 350

Gly Glu Asp Asp Ala Tyr Cys Thr Phe Pro Ser Arg Asp Asp Leu Leu
        355                 360                 365

Leu Phe Ser Pro Ser Leu Leu Gly Gly Pro Ser Pro Pro Ser Thr Ala
    370                 375                 380

Pro Gly Gly Ser Gly Ala Gly Glu Glu Arg Met Pro Pro Ser Leu Gln
385                 390                 395                 400

Glu Arg Val Pro Arg Asp Trp Asp Pro Gln Pro Leu Gly Pro Pro Thr
                405                 410                 415

Pro Gly Val Pro Asp Leu Val Asp Phe Gln Pro Pro Pro Glu Leu Val
            420                 425                 430

Leu Arg Glu Ala Gly Glu Glu Val Pro Asp Ala Gly Pro Arg Glu Gly
        435                 440                 445

Val Ser Phe Pro Trp Ser Arg Pro Pro Gly Gln Gly Glu Phe Arg Ala
    450                 455                 460

Leu Asn Ala Arg Leu Pro Leu Asn Thr Asp Ala Tyr Leu Ser Leu Gln
465                 470                 475                 480

Glu Leu Gln Gly Gln Asp Pro Thr His Leu Val
                485                 490
```

<210> 56
<211> 369
<212> PRT
<213> Homo sapiens

<400> 56

```
Met Leu Lys Pro Ser Leu Pro Phe Thr Ser Leu Leu Phe Leu Gln Leu
1               5                   10                  15
```

```
Pro Leu Leu Gly Val Gly Leu Asn Thr Thr Ile Leu Thr Pro Asn Gly
            20                  25                  30

Asn Glu Asp Thr Thr Ala Asp Phe Phe Leu Thr Thr Met Pro Thr Asp
        35                  40                  45

Ser Leu Ser Val Ser Thr Leu Pro Leu Pro Glu Val Gln Cys Phe Val
    50                  55                  60

Phe Asn Val Glu Tyr Met Asn Cys Thr Trp Asn Ser Ser Ser Glu Pro
65                  70                  75                  80

Gln Pro Thr Asn Leu Thr Leu His Tyr Trp Tyr Lys Asn Ser Asp Asn
                85                  90                  95

Asp Lys Val Gln Lys Cys Ser His Tyr Leu Phe Ser Glu Glu Ile Thr
            100                 105                 110

Ser Gly Cys Gln Leu Gln Lys Lys Glu Ile His Leu Tyr Gln Thr Phe
        115                 120                 125

Val Val Gln Leu Gln Asp Pro Arg Glu Pro Arg Arg Gln Ala Thr Gln
    130                 135                 140

Met Leu Lys Leu Gln Asn Leu Val Ile Pro Trp Ala Pro Glu Asn Leu
145                 150                 155                 160

Thr Leu His Lys Leu Ser Glu Ser Gln Leu Glu Leu Asn Trp Asn Asn
                165                 170                 175

Arg Phe Leu Asn His Cys Leu Glu His Leu Val Gln Tyr Arg Thr Asp
            180                 185                 190

Trp Asp His Ser Trp Thr Glu Gln Ser Val Asp Tyr Arg His Lys Phe
        195                 200                 205

Ser Leu Pro Ser Val Asp Gly Gln Lys Arg Tyr Thr Phe Arg Val Arg
    210                 215                 220
```

```
Ser Arg Phe Asn Pro Leu Cys Gly Ser Ala Gln His Trp Ser Glu Trp
225                 230                 235                 240


Ser His Pro Ile His Trp Gly Ser Asn Thr Ser Lys Glu Asn Pro Phe
                245                 250                 255


Leu Phe Ala Leu Glu Ala Val Val Ile Ser Val Gly Ser Met Gly Leu
            260                 265                 270


Ile Ile Ser Leu Leu Cys Val Tyr Phe Trp Leu Glu Arg Thr Met Pro
        275                 280                 285


Arg Ile Pro Thr Leu Lys Asn Leu Glu Asp Leu Val Thr Glu Tyr His
    290                 295                 300


Gly Asn Phe Ser Ala Trp Ser Gly Val Ser Lys Gly Leu Ala Glu Ser
305                 310                 315                 320


Leu Gln Pro Asp Tyr Ser Glu Arg Leu Cys Leu Val Ser Glu Ile Pro
                325                 330                 335


Pro Lys Gly Gly Ala Leu Gly Glu Gly Pro Gly Ala Ser Pro Cys Asn
            340                 345                 350


Gln His Ser Pro Tyr Trp Ala Pro Pro Cys Tyr Thr Leu Lys Pro Glu
        355                 360                 365


Thr
```

<210> 57
<211> 227
<212> PRT
<213> Homo sapiens

<400> 57

```
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
```

```
1               5                   10                  15

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

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

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

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

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

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

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

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

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

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

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

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

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


Pro Gly Lys
225
```

<210> 58
<211> 325
<212> PRT
<213> Homo sapiens

<400> 58

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


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


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


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


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


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


Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro Pro
            100                 105                 110


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


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

```
Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
145                 150                 155                 160

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

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

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

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

Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln
225                 230                 235                 240

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

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
            260                 265                 270

Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
        275                 280                 285

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

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

Leu Ser Pro Gly Lys
                325
```

<210> 59
<211> 246
<212> PRT
<213> Homo sapiens

<400> 59

```
His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Leu Lys Thr
1               5                   10                  15


Pro Leu Gly Asp Thr Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
            20                  25                  30


Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
        35                  40                  45


Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
    50                  55                  60


Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
65                  70                  75                  80


Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
                85                  90                  95


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


Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
        115                 120                 125


Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
    130                 135                 140


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


Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
                165                 170                 175
```

```
Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
            180                 185                 190

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
        195                 200                 205

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
    210                 215                 220

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
225                 230                 235                 240

Ser Leu Ser Pro Gly Lys
                245
```

<210> 60
<211> 383
<212> PRT
<213> Homo sapiens

<400> 60

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

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

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

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

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

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

```
Phe Arg Trp Pro Glu Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr
            100                 105                 110

Ala Gln Pro Gln Ala Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro
        115                 120                 125

Ala Thr Thr Arg Asn Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu
    130                 135                 140

Lys Glu Lys Glu Glu Gln Glu Glu Arg Glu Thr Lys Thr Pro Glu Cys
145                 150                 155                 160

Pro Ser His Thr Gln Pro Leu Gly Val Tyr Leu Leu Thr Pro Ala Val
                165                 170                 175

Gln Asp Leu Trp Leu Arg Asp Lys Ala Thr Phe Thr Cys Phe Val Val
            180                 185                 190

Gly Ser Asp Leu Lys Asp Ala His Leu Thr Trp Glu Val Ala Gly Lys
        195                 200                 205

Val Pro Thr Gly Gly Val Glu Glu Gly Leu Leu Glu Arg His Ser Asn
    210                 215                 220

Gly Ser Gln Ser Gln His Ser Arg Leu Thr Leu Pro Arg Ser Leu Trp
225                 230                 235                 240

Asn Ala Gly Thr Ser Val Thr Cys Thr Leu Asn His Pro Ser Leu Pro
                245                 250                 255

Pro Gln Arg Leu Met Ala Leu Arg Glu Pro Ala Ala Gln Ala Pro Val
            260                 265                 270

Lys Leu Ser Leu Asn Leu Leu Ala Ser Ser Asp Pro Pro Glu Ala Ala
        275                 280                 285
```

```
Ser Trp Leu Leu Cys Glu Val Ser Gly Phe Ser Pro Pro Asn Ile Leu
    290                 295                 300

Leu Met Trp Leu Glu Asp Gln Arg Glu Val Asn Thr Ser Gly Phe Ala
305                 310                 315                 320

Pro Ala Arg Pro Pro Pro Gln Pro Arg Ser Thr Thr Phe Trp Ala Trp
                325                 330                 335

Ser Val Leu Arg Val Pro Ala Pro Pro Ser Pro Gln Pro Ala Thr Tyr
            340                 345                 350

Thr Cys Val Val Ser His Glu Asp Ser Arg Thr Leu Leu Asn Ala Ser
        355                 360                 365

Arg Ser Leu Glu Val Ser Tyr Val Thr Asp His Gly Pro Met Lys
    370                 375                 380
```

<210> 61
<211> 276
<212> PRT
<213> Homo sapiens

<400> 61

```
Val Thr Ser Thr Leu Thr Ile Lys Glx Ser Asp Trp Leu Gly Glu Ser
1               5                   10                  15

Met Phe Thr Cys Arg Val Asp His Arg Gly Leu Thr Phe Gln Gln Asn
            20                  25                  30

Ala Ser Ser Met Cys Val Pro Asp Gln Asp Thr Ala Ile Arg Val Phe
        35                  40                  45

Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe Leu Thr Lys Ser Thr Lys
    50                  55                  60

Leu Thr Cys Leu Val Thr Asp Leu Thr Thr Tyr Asx Ser Val Thr Ile
65                  70                  75                  80
```

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

Ser Glu Ser His Pro Asn Ala Thr Phe Ser Ala Val Gly Glu Ala Ser
            100                 105                 110

Ile Cys Glu Asp Asx Asp Trp Ser Gly Glu Arg Phe Thr Cys Thr Val
        115                 120                 125

Thr His Thr Asp Leu Pro Ser Pro Leu Lys Gln Thr Ile Ser Arg Pro
    130                 135                 140

Lys Gly Val Ala Leu His Arg Pro Asx Val Tyr Leu Leu Pro Pro Ala
145                 150                 155                 160

Arg Glx Glx Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val
                165                 170                 175

Thr Gly Phe Ser Pro Ala Asp Val Phe Val Glu Trp Met Gln Arg Gly
            180                 185                 190

Glu Pro Leu Ser Pro Gln Lys Tyr Val Thr Ser Ala Pro Met Pro Glu
        195                 200                 205

Pro Gln Ala Pro Gly Arg Tyr Phe Ala His Ser Ile Leu Thr Val Ser
    210                 215                 220

Glu Glu Glu Trp Asn Thr Gly Gly Thr Tyr Thr Cys Val Val Ala His
225                 230                 235                 240

Glu Ala Leu Pro Asn Arg Val Thr Glu Arg Thr Val Asp Lys Ser Thr
                245                 250                 255

Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val Met Ser Asp Thr Ala
            260                 265                 270

Gly Thr Cys Tyr
```

275

<210> 62
<211> 353
<212> PRT
<213> Homo sapiens

<400> 62

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 Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro
100 105 110

Ser Thr Pro Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser
115 120 125

Leu His Arg Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn
130 135 140

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

```
Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Glu
                165                 170                 175

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

Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr
        195                 200                 205

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

Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu
225                 230                 235                 240

Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser
                245                 250                 255

Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro
            260                 265                 270

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

Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp
    290                 295                 300

Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu
305                 310                 315                 320

Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro
                325                 330                 335

Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys
            340                 345                 350

Tyr
```

<210> 63
<211> 222
<212> PRT
<213> Homo sapiens

<400> 63

```
Ala Asp Pro Cys Asp Ser Asn Pro Arg Gly Val Ser Ala Tyr Leu Ser
1               5                   10                  15


Arg Pro Ser Pro Phe Asp Leu Phe Ile Arg Lys Ser Pro Thr Ile Thr
            20                  25                  30


Cys Leu Val Val Asp Leu Ala Pro Ser Lys Gly Thr Val Asn Leu Thr
        35                  40                  45


Trp Ser Arg Ala Ser Gly Lys Pro Val Asn His Ser Thr Arg Lys Glu
    50                  55                  60


Glu Lys Gln Arg Asn Gly Thr Leu Thr Val Thr Ser Thr Leu Pro Val
65                  70                  75                  80


Gly Thr Arg Asp Trp Ile Glu Gly Glu Thr Tyr Gln Cys Arg Val Thr
                85                  90                  95


His Pro His Leu Pro Arg Ala Leu Met Arg Ser Thr Thr Lys Thr Ser
            100                 105                 110


Gly Pro Arg Ala Ala Pro Glu Val Tyr Ala Phe Ala Thr Pro Glu Trp
        115                 120                 125


Pro Gly Ser Arg Asp Lys Arg Thr Leu Ala Cys Leu Ile Gln Asn Phe
    130                 135                 140


Met Pro Glu Asp Ile Ser Val Gln Trp Leu His Asn Glu Val Gln Leu
145                 150                 155                 160


Pro Asp Ala Arg His Ser Thr Thr Gln Pro Arg Lys Thr Lys Gly Ser
```

```
                165                 170                 175

Gly Phe Phe Val Phe Ser Arg Leu Glu Val Thr Arg Ala Glu Trp Glu
            180                 185                 190

Gln Lys Asp Glu Phe Ile Cys Arg Ala Val His Glu Ala Ala Ser Pro
        195                 200                 205

Ser Gln Thr Val Gln Arg Ala Val Ser Val Asn Pro Gly Lys
    210                 215                 220
```

<210> 64
<211> 327
<212> PRT
<213> Homo sapiens

<400> 64

```
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 Pro Pro Cys Pro Ser Cys Pro Ala Pro
            100                 105                 110
```

```
Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
        115                 120                 125

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

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

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

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

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

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

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys
225                 230                 235                 240

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

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
            260                 265                 270

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
        275                 280                 285

Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser
    290                 295                 300

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

Leu Ser Leu Ser Leu Gly Lys
325

<210> 65
<211> 365
<212> PRT
<213> Homo sapiens

<400> 65

Met Ala Val Met Ala Pro Arg Thr Leu Leu Leu Leu Leu Ser Gly Ala
1 5 10 15

Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
20 25 30

Phe Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala
35 40 45

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

Ala Ser Gln Lys Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
65 70 75 80

Pro Glu Tyr Trp Asp Gln Glu Thr Arg Asn Met Lys Ala His Ser Gln
85 90 95

Thr Asp Arg Ala Asn Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser
100 105 110

Glu Asp Gly Ser His Thr Ile Gln Ile Met Tyr Gly Cys Asp Val Gly
115 120 125

Pro Asp Gly Arg Phe Leu Arg Gly Tyr Arg Gln Asp Ala Tyr Asp Gly
130 135 140

Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala

```
145                 150                 155                 160

Asp Met Ala Ala Gln Ile Thr Lys Arg Lys Trp Glu Ala Val His Ala
                165                 170                 175

Ala Glu Gln Arg Arg Val Tyr Leu Glu Gly Arg Cys Val Asp Gly Leu
            180                 185                 190

Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Pro
        195                 200                 205

Pro Lys Thr His Met Thr His His Pro Ile Ser Asp His Glu Ala Thr
    210                 215                 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
225                 230                 235                 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
                245                 250                 255

Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val
            260                 265                 270

Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu
        275                 280                 285

Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Leu Ser Ser Gln Pro
    290                 295                 300

Thr Ile Pro Ile Val Gly Ile Ile Ala Gly Leu Val Leu Leu Gly Ala
305                 310                 315                 320

Val Ile Thr Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser
                325                 330                 335

Ser Asp Arg Lys Gly Gly Ser Tyr Thr Gln Ala Ala Ser Ser Asp Ser
            340                 345                 350
```

Ala Gln Gly Ser Asp Val Ser Leu Thr Ala Cys Lys Val
        355   360   365

<210> 66
<211> 362
<212> PRT
<213> Homo sapiens

<400> 66

Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Leu Ser Ala Ala
1   5   10   15

Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
            20   25   30

Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser
        35   40   45

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

Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
65   70   75   80

Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln
                85   90   95

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

Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly
        115   120   125

Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly
    130   135   140

Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala
145   150   155   160

```
Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu
                165                 170                 175

Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu
            180                 185                 190

Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro
        195                 200                 205

Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr
    210                 215                 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
225                 230                 235                 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
                245                 250                 255

Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Trp Ala Ala Val Val
            260                 265                 270

Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu
        275                 280                 285

Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Ser
    290                 295                 300

Thr Val Pro Ile Val Gly Ile Val Ala Gly Leu Ala Val Leu Ala Val
305                 310                 315                 320

Val Val Ile Gly Ala Val Val Ala Ala Val Met Cys Arg Arg Lys Ser
                325                 330                 335

Ser Gly Gly Lys Gly Gly Ser Tyr Ser Gln Ala Ala Cys Ser Asp Ser
            340                 345                 350
```

```
Ala Gln Gly Ser Asp Val Ser Leu Thr Ala
        355                 360


<210>  67
<211>  366
<212>  PRT
<213>  Homo sapiens

<400>  67

Met Arg Val Met Ala Pro Arg Ala Leu Leu Leu Leu Leu Ser Gly Gly
1               5                   10                  15


Leu Ala Leu Thr Glu Thr Trp Ala Cys Ser His Ser Met Arg Tyr Phe
            20                  25                  30


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


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


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


Pro Glu Tyr Trp Asp Arg Glu Thr Gln Asn Tyr Lys Arg Gln Ala Gln
                85                  90                  95


Ala Asp Arg Val Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser
            100                 105                 110


Glu Asp Gly Ser His Thr Leu Gln Arg Met Tyr Gly Cys Asp Leu Gly
        115                 120                 125


Pro Asp Gly Arg Leu Leu Arg Gly Tyr Asp Gln Ser Ala Tyr Asp Gly
    130                 135                 140


Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala
145                 150                 155                 160
```

```
Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Leu Glu Ala Ala Arg Ala
                165                 170                 175

Ala Glu Gln Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu
            180                 185                 190

Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Ala Glu Pro
        195                 200                 205

Pro Lys Thr His Val Thr His His Pro Leu Ser Asp His Glu Ala Thr
    210                 215                 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
225                 230                 235                 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
                245                 250                 255

Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val
            260                 265                 270

Val Pro Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Met Gln His Glu
        275                 280                 285

Gly Leu Gln Glu Pro Leu Thr Leu Ser Trp Glu Pro Ser Ser Gln Pro
    290                 295                 300

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

Leu Ala Val Leu Gly Ala Val Val Thr Ala Met Met Cys Arg Arg Lys
                325                 330                 335

Ser Ser Gly Gly Lys Gly Gly Ser Cys Ser Gln Ala Ala Cys Ser Asn
            340                 345                 350

Ser Ala Gln Gly Ser Asp Glu Ser Leu Ile Thr Cys Lys Ala
```

355 360 365

<210> 68
<211> 833
<212> PRT
<213> Homo sapiens

<400> 68

Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu
1 5 10 15

Val Thr Asn Ser Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu
20 25 30

Gln Leu Glu Ala Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile
35 40 45

Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe
50 55 60

Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu
65 70 75 80

Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys
85 90 95

Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile
100 105 110

Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala
115 120 125

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

Cys Gln Ser Ile Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

```
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Pro Thr
                165                 170                 175

Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Ala Leu Leu Leu
            180                 185                 190

Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys
        195                 200                 205

Leu Thr Arg Met Leu Thr Ala Lys Phe Tyr Met Pro Lys Lys Ala Thr
    210                 215                 220

Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu
225                 230                 235                 240

Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu Arg Pro Arg
                245                 250                 255

Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu Lys Gly Ser
            260                 265                 270

Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val
        275                 280                 285

Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr
    290                 295                 300

Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
305                 310                 315                 320

Ser Gly Gly Gly Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr
                325                 330                 335

Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly
            340                 345                 350

Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser
        355                 360                 365
```

```
Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu
    370                 375                 380

Tyr Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His
385                 390                 395                 400

Arg Val Asp Leu Gly Thr Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala
                405                 410                 415

Gly Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp
            420                 425                 430

Trp Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp
        435                 440                 445

Tyr Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met
    450                 455                 460

Ala Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu
465                 470                 475                 480

Gln Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg
                485                 490                 495

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

Thr His Met Thr His His Ala Val Ser Asp His Glu Ala Thr Leu Arg
        515                 520                 525

Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln
    530                 535                 540

Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg
545                 550                 555                 560
```

```
Pro Cys Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro
                565                 570                 575

Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu
            580                 585                 590

Pro Lys Pro Leu Thr Leu Arg Trp Glu Ala Ala Ala Gly Gly Asp Lys
        595                 600                 605

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro
    610                 615                 620

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
625                 630                 635                 640

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
                645                 650                 655

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
            660                 665                 670

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Ala Ser Thr Tyr Arg Val
        675                 680                 685

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
    690                 695                 700

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
705                 710                 715                 720

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
                725                 730                 735

Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr
            740                 745                 750

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
        755                 760                 765
```

```
Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
    770                 775                 780

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
785                 790                 795                 800

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
                805                 810                 815

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
            820                 825                 830

Lys
```

<210> 69
<211> 813
<212> PRT
<213> Homo sapiens

<400> 69

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

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

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

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

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

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

```
                85                  90                  95

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

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Pro Thr Ser Ser Ser Thr
145                 150                 155                 160

Lys Lys Thr Gln Leu Gln Leu Glu Ala Leu Leu Leu Asp Leu Gln Met
                165                 170                 175

Ile Leu Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met
            180                 185                 190

Leu Thr Ala Lys Phe Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His
        195                 200                 205

Leu Gln Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn
    210                 215                 220

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

Asn Ile Asn Val Ile Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe
                245                 250                 255

Met Cys Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn
            260                 265                 270

Arg Trp Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr Leu Thr Gly Gly
        275                 280                 285
```

```
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
    290                 295                 300

Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg
305                 310                 315                 320

Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp
                325                 330                 335

Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met Glu
            340                 345                 350

Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly
        355                 360                 365

Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu
    370                 375                 380

Gly Thr Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala Gly Ser His Thr
385                 390                 395                 400

Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu
                405                 410                 415

Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu
            420                 425                 430

Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr
        435                 440                 445

Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala
    450                 455                 460

Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn
465                 470                 475                 480

Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr
```

```
                485                 490                 495

His His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu
            500                 505                 510

Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu
        515                 520                 525

Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Cys Gly Asp
    530                 535                 540

Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu
545                 550                 555                 560

Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu
                565                 570                 575

Thr Leu Arg Trp Glu Ala Ala Ala Gly Gly Asp Lys Thr His Thr Cys
            580                 585                 590

Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu
        595                 600                 605

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
    610                 615                 620

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
625                 630                 635                 640

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
                645                 650                 655

Pro Arg Glu Glu Gln Tyr Ala Ser Thr Tyr Arg Val Val Ser Val Leu
            660                 665                 670

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
        675                 680                 685
```

```
Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
    690                 695                 700

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
705                 710                 715                 720

Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
                725                 730                 735

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
            740                 745                 750

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
        755                 760                 765

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
    770                 775                 780

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
785                 790                 795                 800

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                805                 810
```

<210> 70
<211> 2505
<212> DNA
<213> Homo sapiens

<400> 70

```
atgtacagga tgcaactcct gtcttgcatt gcactaagtc ttgcacttgt cacaaacagt       60

gcacctactt caagttctac aaagaaaaca cagctacaac tggaggcatt actgctggat      120

ttacagatga ttttgaatgg aattaataat tacaagaatc ccaaactcac caggatgctc      180

acagcaaagt tttacatgcc caagaaggcc acagaactga aacatcttca gtgtctagaa      240

gaagaactca aacctctgga ggaagtgcta aatttagctc aaagcaaaaa ctttcactta      300

agacccaggg acttaatcag caatatcaac gtaatagttc tggaactaaa gggatctgaa      360
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acaacattca tgtgtgaata tgctgatgag acagcaacca ttgtagaatt tctgaacaga 420

tggattacct tttgtcaaag catcatctca acactgactg gaggcggagg atctggtggt 480

ggaggttctg gtggtggggg atctggaggc ggaggatctg cacctacttc aagttctaca 540

aagaaaacac agctacaact ggaggcatta ctgctggatt tacagatgat tttgaatgga 600

attaataatt acaagaatcc caaactcacc aggatgctca cagcaaagtt ttacatgccc 660

aagaaggcca cagaactgaa acatcttcag tgtctagaag aagaactcaa acctctggag 720

gaagtgctaa atttagctca aagcaaaaac tttcacttaa gacccaggga cttaatcagc 780

aatatcaacg taatagttct ggaactaaag ggatctgaaa caacattcat gtgtgaatat 840

gctgatgaga cagcaaccat tgtagaattt ctgaacagat ggattacctt ttgtcaaagc 900

atcatctcaa cactgactgg aggcggagga tctggtggtg gaggttctgg tggtggggga 960

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cccggccgcg gggagccccg cttcatcgca gtgggctacg tggacgacac gcagttcgtg 1080

cggttcgaca gcgacgccgc gagccagagg atggagccgc gggcgccgtg gatagagcag 1140

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cagttgagag cctacctgga gggcacgtgc gtggagtggc tccgcagata cctggagaac 1500

gggaaggaga cgctgcagcg cacggacgcc cccaaaacgc atatgactca ccacgctgtc 1560

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aatggcaagg agtacaagtg caaggtctcc aacaaagccc tcccagcccc catcgagaaa 2160

accatctcca aagccaaagg gcagccccga gaaccacagg tgtacaccct gccccatcc 2220

cgggaggaga tgaccaagaa ccaggtcagc ctgacctgcc tggtcaaagg cttctatccc 2280

agcgacatcg ccgtggagtg ggagagcaat gggcagccgg agaacaacta caagaccacg 2340

cctcccgtgc tggactccga cggctccttc ttcctctaca gcaagctcac cgtggacaag 2400

agcagatggc agcaggggaa cgtcttctca tgctccgtga tgcacgaggc tctgcacaac 2460

cactacacgc agaagtccct ctccctgtct ccgggtaaat agtga 2505

<210> 71
<211> 833
<212> PRT
<213> Homo sapiens

<400> 71

Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu
1 5 10 15

Val Thr Asn Ser Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu
20 25 30

Gln Leu Glu Ala Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile
35 40 45

Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe
50 55 60

Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu
65 70 75 80

```
Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys
                85                  90                  95

Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile
            100                 105                 110

Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala
        115                 120                 125

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

Cys Gln Ser Ile Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly
145                 150                 155                 160

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Pro Thr
                165                 170                 175

Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Ala Leu Leu Leu
            180                 185                 190

Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys
        195                 200                 205

Leu Thr Arg Met Leu Thr Ala Lys Phe Tyr Met Pro Lys Lys Ala Thr
    210                 215                 220

Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu
225                 230                 235                 240

Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu Arg Pro Arg
                245                 250                 255

Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu Lys Gly Ser
            260                 265                 270

Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val
```

```
        275                 280                 285

Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr
    290                 295                 300

Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
305                 310                 315                 320

Ser Gly Gly Gly Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr
                325                 330                 335

Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly
            340                 345                 350

Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser
        355                 360                 365

Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu
    370                 375                 380

Tyr Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His
385                 390                 395                 400

Arg Val Asp Leu Gly Thr Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala
                405                 410                 415

Gly Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp
            420                 425                 430

Trp Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp
        435                 440                 445

Tyr Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met
    450                 455                 460

Ala Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu
465                 470                 475                 480
```

```
Gln Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg
               485                 490                 495

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

Thr His Met Thr His His Ala Val Ser Asp His Glu Ala Thr Leu Arg
        515                 520                 525

Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln
    530                 535                 540

Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg
545                 550                 555                 560

Pro Cys Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro
               565                 570                 575

Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu
            580                 585                 590

Pro Lys Pro Leu Thr Leu Arg Trp Glu Ala Ala Ala Gly Gly Asp Lys
        595                 600                 605

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro
    610                 615                 620

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
625                 630                 635                 640

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
               645                 650                 655

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
            660                 665                 670

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
```

```
        675                 680                 685

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
    690                 695                 700

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys
705                 710                 715                 720

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
                725                 730                 735

Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr
            740                 745                 750

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
        755                 760                 765

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
    770                 775                 780

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
785                 790                 795                 800

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
                805                 810                 815

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
            820                 825                 830

Lys
```

<210> 72
<211> 813
<212> PRT
<213> Homo sapiens

<400> 72

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

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

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

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

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

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

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

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Pro Thr Ser Ser Ser Thr
145                 150                 155                 160

Lys Lys Thr Gln Leu Gln Leu Glu Ala Leu Leu Leu Asp Leu Gln Met
                165                 170                 175

Ile Leu Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met
            180                 185                 190

Leu Thr Ala Lys Phe Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His
        195                 200                 205
```

```
Leu Gln Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn
    210                 215                 220

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

Asn Ile Asn Val Ile Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe
                245                 250                 255

Met Cys Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn
            260                 265                 270

Arg Trp Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr Leu Thr Gly Gly
        275                 280                 285

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
    290                 295                 300

Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg
305                 310                 315                 320

Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp
                325                 330                 335

Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met Glu
            340                 345                 350

Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly
        355                 360                 365

Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu
    370                 375                 380

Gly Thr Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala Gly Ser His Thr
385                 390                 395                 400
```

```
Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu
                405                 410                 415

Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu
            420                 425                 430

Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr
        435                 440                 445

Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala
    450                 455                 460

Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn
465                 470                 475                 480

Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr
                485                 490                 495

His His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu
            500                 505                 510

Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu
        515                 520                 525

Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Cys Gly Asp
    530                 535                 540

Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu
545                 550                 555                 560

Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu
                565                 570                 575

Thr Leu Arg Trp Glu Ala Ala Ala Gly Gly Asp Lys Thr His Thr Cys
            580                 585                 590

Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu
        595                 600                 605
```

```
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
    610                 615                 620

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
625                 630                 635                 640

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
                645                 650                 655

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
            660                 665                 670

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
        675                 680                 685

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
    690                 695                 700

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
705                 710                 715                 720

Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
                725                 730                 735

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
            740                 745                 750

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
        755                 760                 765

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
    770                 775                 780

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
785                 790                 795                 800
```

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
805 810

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<211> 2505
<212> DNA
<213> Homo sapiens

<400> 73
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gcacctactt caagttctac aaagaaaaca cagctacaac tggaggcatt actgctggat 120

ttacagatga ttttgaatgg aattaataat tacaagaatc ccaaactcac caggatgctc 180

acagcaaagt tttacatgcc caagaaggcc acagaactga aacatcttca gtgtctagaa 240

gaagaactca aacctctgga ggaagtgcta aatttagctc aaagcaaaaa ctttcactta 300

agacccaggg acttaatcag caatatcaac gtaatagttc tggaactaaa gggatctgaa 360

acaacattca tgtgtgaata tgctgatgag acagcaacca ttgtagaatt tctgaacaga 420

tggattacct tttgtcaaag catcatctca acactgactg gaggcggagg atctggtggt 480

ggaggttctg gtggtggggg atctggaggc ggaggatctg cacctacttc aagttctaca 540

aagaaaacac agctacaact ggaggcatta ctgctggatt tacagatgat tttgaatgga 600

attaataatt acaagaatcc caaactcacc aggatgctca cagcaaagtt ttacatgccc 660

aagaaggcca cagaactgaa acatcttcag tgtctagaag aagaactcaa acctctggag 720

gaagtgctaa atttagctca aagcaaaaac tttcacttaa gacccaggga cttaatcagc 780

aatatcaacg taatagttct ggaactaaag ggatctgaaa caacattcat gtgtgaatat 840

gctgatgaga cagcaaccat tgtagaattt ctgaacagat ggattacctt ttgtcaaagc 900

atcatctcaa cactgactgg aggcggagga tctggtggtg gaggttctgg tggtggggga 960

tctggaggcg gaggatctgg ctctcactcc atgaggtatt tcttcacatc cgtgtcccgg 1020

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cggttcgaca gcgacgccgc gagccagagg atggagccgc gggcgccgtg gatagagcag 1140

gagggtccgg agtattggga cggggagaca cggaaagtga aggcccactc acagactcac 1200

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gggaaggaga cgctgcagcg cacggacgcc cccaaaacgc atatgactca ccacgctgtc 1560

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aatggcaagg agtacaagtg caaggtctcc aacaaagccc tcccagcccc catcgagaaa 2160

accatctcca aagccaaagg gcagccccga gaaccacagg tgtacaccct gcccccatcc 2220

cgggaggaga tgaccaagaa ccaggtcagc ctgacctgcc tggtcaaagg cttctatccc 2280

agcgacatcg ccgtggagtg ggagagcaat gggcagccgg agaacaacta caagaccacg 2340

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cactacacgc agaagtccct ctccctgtct ccgggtaaat agtga 2505

<210> 74
<211> 833
<212> PRT
<213> Homo sapiens

<400> 74

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Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu
1               5                  10                  15

Val Thr Asn Ser Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu
            20                  25                  30

Gln Leu Glu Ala Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile
        35                  40                  45

Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr Ala Lys Phe
    50                  55                  60

Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu
65                  70                  75                  80

Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys
                85                  90                  95

Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile
            100                 105                 110

Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala
        115                 120                 125

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

Cys Gln Ser Ile Ile Ser Thr Leu Thr Gly Gly Gly Gly Ser Gly Gly
145                 150                 155                 160

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Pro Thr
                165                 170                 175

Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu Ala Leu Leu Leu
            180                 185                 190
```

```
Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys
        195                 200                 205

Leu Thr Arg Met Leu Thr Ala Lys Phe Tyr Met Pro Lys Lys Ala Thr
    210                 215                 220

Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu
225                 230                 235                 240

Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu Arg Pro Arg
                245                 250                 255

Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu Lys Gly Ser
            260                 265                 270

Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val
        275                 280                 285

Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr
    290                 295                 300

Leu Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
305                 310                 315                 320

Ser Gly Gly Gly Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr
                325                 330                 335

Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly
            340                 345                 350

Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser
        355                 360                 365

Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu
    370                 375                 380

Tyr Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His
385                 390                 395                 400
```

```
Arg Val Asp Leu Gly Thr Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala
                405                 410                 415

Gly Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp
            420                 425                 430

Trp Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp
        435                 440                 445

Tyr Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met
    450                 455                 460

Ala Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu
465                 470                 475                 480

Gln Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg
                485                 490                 495

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

Thr His Met Thr His His Ala Val Ser Asp His Glu Ala Thr Leu Arg
        515                 520                 525

Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln
    530                 535                 540

Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg
545                 550                 555                 560

Pro Cys Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro
                565                 570                 575

Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu
            580                 585                 590
```

```
Pro Lys Pro Leu Thr Leu Arg Trp Glu Ala Ala Ala Gly Gly Asp Lys
        595                 600                 605

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Phe Glu Gly Gly Pro
    610                 615                 620

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
625                 630                 635                 640

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
                645                 650                 655

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
            660                 665                 670

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
        675                 680                 685

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
    690                 695                 700

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Ser Ile Glu Lys
705                 710                 715                 720

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
                725                 730                 735

Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr
            740                 745                 750

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
        755                 760                 765

Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu
    770                 775                 780

Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
785                 790                 795                 800
```

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
805 810 815

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
820 825 830

Lys

<210> 75
<211> 813
<212> PRT
<213> Homo sapiens

<400> 75

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

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

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

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

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

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

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

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

```
        115                 120                 125

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Pro Thr Ser Ser Ser Thr
145                 150                 155                 160

Lys Lys Thr Gln Leu Gln Leu Glu Ala Leu Leu Leu Asp Leu Gln Met
                165                 170                 175

Ile Leu Asn Gly Ile Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met
            180                 185                 190

Leu Thr Ala Lys Phe Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His
        195                 200                 205

Leu Gln Cys Leu Glu Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn
    210                 215                 220

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

Asn Ile Asn Val Ile Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe
                245                 250                 255

Met Cys Glu Tyr Ala Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn
            260                 265                 270

Arg Trp Ile Thr Phe Cys Gln Ser Ile Ile Ser Thr Leu Thr Gly Gly
        275                 280                 285

Gly Gly Ser Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
    290                 295                 300

Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg
305                 310                 315                 320
```

```
Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp
                325                 330                 335

Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met Glu
            340                 345                 350

Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly
        355                 360                 365

Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu
    370                 375                 380

Gly Thr Leu Arg Gly Ala Tyr Asn Gln Ser Glu Ala Gly Ser His Thr
385                 390                 395                 400

Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu
                405                 410                 415

Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu
            420                 425                 430

Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr
        435                 440                 445

Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala
    450                 455                 460

Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn
465                 470                 475                 480

Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr
                485                 490                 495

His His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu
            500                 505                 510

Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu
```

```
        515                 520                 525

Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Cys Gly Asp
    530                 535                 540

Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu
545                 550                 555                 560

Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu
                565                 570                 575

Thr Leu Arg Trp Glu Ala Ala Ala Gly Gly Asp Lys Thr His Thr Cys
            580                 585                 590

Pro Pro Cys Pro Ala Pro Glu Phe Glu Gly Gly Pro Ser Val Phe Leu
        595                 600                 605

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
    610                 615                 620

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
625                 630                 635                 640

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
                645                 650                 655

Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
            660                 665                 670

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
        675                 680                 685

Val Ser Asn Lys Ala Leu Pro Ala Ser Ile Glu Lys Thr Ile Ser Lys
    690                 695                 700

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
705                 710                 715                 720
```

```
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
                725                 730                 735

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
            740                 745                 750

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
        755                 760                 765

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
    770                 775                 780

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
785                 790                 795                 800

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                805                 810
```

<210> 76
<211> 2505
<212> DNA
<213> Homo sapiens

<400> 76

```
atgtacagga tgcaactcct gtcttgcatt gcactaagtc ttgcacttgt cacaaacagt       60

gcacctactt caagttctac aaagaaaaca cagctacaac tggaggcatt actgctggat      120

ttacagatga ttttgaatgg aattaataat tacaagaatc ccaaactcac caggatgctc      180

acagcaaagt tttacatgcc caagaaggcc acagaactga aacatcttca gtgtctagaa      240

gaagaactca aacctctgga ggaagtgcta aatttagctc aaagcaaaaa ctttcactta      300

agacccaggg acttaatcag caatatcaac gtaatagttc tggaactaaa gggatctgaa      360

acaacattca tgtgtgaata tgctgatgag acagcaacca ttgtagaatt tctgaacaga      420

tggattacct tttgtcaaag catcatctca acactgactg gaggcggagg atctggtggt      480

ggaggttctg gtggtggggg atctggaggc ggaggatctg cacctacttc aagttctaca      540

aagaaaacac agctacaact ggaggcatta ctgctggatt tacagatgat tttgaatgga      600
```

attaataatt acaagaatcc caaactcacc aggatgctca cagcaaagtt ttacatgccc 660

aagaaggcca cagaactgaa acatcttcag tgtctagaag aagaactcaa acctctggag 720

gaagtgctaa atttagctca aagcaaaaac tttcacttaa gacccaggga cttaatcagc 780

aatatcaacg taatagttct ggaactaaag ggatctgaaa caacattcat gtgtgaatat 840

gctgatgaga cagcaaccat tgtagaattt ctgaacagat ggattacctt ttgtcaaagc 900

atcatctcaa cactgactgg aggcggagga tctggtggtg gaggttctgg tggtggggga 960

tctggaggcg gaggatctgg ctctcactcc atgaggtatt tcttcacatc cgtgtcccgg 1020

cccggccgcg gggagccccg cttcatcgca gtgggctacg tggacgacac gcagttcgtg 1080

cggttcgaca gcgacgccgc gagccagagg atggagccgc gggcgccgtg gatagagcag 1140

gagggtccgg agtattggga cggggagaca cggaaagtga aggcccactc acagactcac 1200

cgagtggacc tggggaccct gcgcggcgcc tacaaccaga gcgaggccgg ttctcacacc 1260

gtccagagga tgtatggctg cgacgtgggg tcggactggc gcttcctccg cgggtaccac 1320

cagtacgcct acgacggcaa ggattacatc gccctgaaag aggacctgcg ctcttggacc 1380

gcggcggaca tggcagctca gaccaccaag cacaagtggg aggcggccca tgtggcggag 1440

cagttgagag cctacctgga gggcacgtgc gtggagtggc tccgcagata cctggagaac 1500

gggaaggaga cgctgcagcg cacggacgcc cccaaaacgc atatgactca ccacgctgtc 1560

tctgaccatg aagccaccct gaggtgctgg gccctgagct tctaccctgc ggagatcaca 1620

ctgacctggc agcgggatgg ggaggaccag acccaggaca cggagctcgt ggagaccagg 1680

ccttgcgggg atggaacctt ccagaagtgg gcggctgtgg tggtgccttc tggacaggag 1740

cagagataca cctgccatgt gcagcatgag ggtttgccca agcccctcac cctgagatgg 1800

gaggcagctg cgggtggcga caaaactcac acatgcccac cgtgcccagc acctgaattc 1860

gaggggggac cgtcagtctt cctcttcccc ccaaaaccca aggacaccct catgatctcc 1920

cggacccctg aggtcacatg cgtggtggtg gacgtgagcc acgaagaccc tgaggtcaag 1980

ttcaactggt acgtggacgg cgtggaggtg cataatgcca agacaaagcc gcgggaggag 2040

cagtacaaca gcacgtaccg tgtggtcagc gtcctcaccg tcctgcacca ggactggctg 2100

aatggcaagg agtacaagtg caaggtctcc aacaaagccc tcccagccag catcgagaaa 2160

accatctcca aagccaaagg gcagccccga gaaccacagg tgtacaccct gcccccatcc 2220

cgggaggaga tgaccaagaa ccaggtcagc ctgacctgcc tggtcaaagg cttctatccc 2280

agcgacatcg ccgtggagtg ggagagcaat gggcagccgg agaacaacta caagaccacg 2340

cctcccgtgc tggactccga cggctccttc ttcctctaca gcaagctcac cgtggacaag 2400

agcagatggc agcaggggaa cgtcttctca tgctccgtga tgcacgaggc tctgcacaac 2460

cactacacgc agaagtccct ctccctgtct ccgggtaaat agtga 2505

<210> 77
<211> 144
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic Polypeptide Sequence

<400> 77

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
1 5 10 15

Gly Leu Glu Ala Tyr Met Leu Asp Leu Gln Pro Glu Thr Thr Gly Gly
20 25 30

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ile Gln Arg
35 40 45

Thr Pro Lys Ile Gln Val Tyr Ser Cys His Pro Ala Glu Asn Gly Lys
50 55 60

Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro Ser Asp Ile
65 70 75 80

Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys Val Glu His
85 90 95

Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu Leu Tyr Tyr
100 105 110

Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys Arg Val Asn
115 120 125

His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp Arg Asp Met
130 135 140

<210> 78
<211> 248
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic Polypeptide Sequence

<400> 78

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ile Gln Tyr Met Leu Asp Leu
20 25 30

Gln Pro Glu Thr Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
35 40 45

Gly Gly Gly Ser Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Cys
50 55 60

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

Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu
85 90 95

Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp
100 105 110

```
Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp
        115                 120                 125


Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile
    130                 135                 140


Val Lys Trp Asp Arg Asp Met Arg Thr Pro Lys Ile Gln Val Tyr Ser
145                 150                 155                 160


Cys His Pro Ala Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val
                165                 170                 175


Ser Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly
            180                 185                 190


Glu Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp
        195                 200                 205


Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys
    210                 215                 220


Asp Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys
225                 230                 235                 240


Ile Val Lys Trp Asp Arg Asp Met
                245
```

<210> 79
<211> 438
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic Polynucleotide Sequence

<400> 79

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atgtctcgct ccgtggcctt agctgtgctc gcgctactct ctctttctgg cctggaggcc       60

tacatgctcg atttgcagcc cgaaacgacg ggtggaggtg gttctggagg aggcggttcg      120

ggcggaggtg gtagtatcca gcgtactcca aagattcagg tttactcatg ccatccagca      180
```

gagaatggaa agtcaaattt cctgaattgc tatgtgtctg ggtttcatcc atccgacatt 240

gaagttgact tactgaagaa tggagagaga attgaaaaag tggagcattc agacttgtct 300

ttcagcaagg actggtcttt ctatctcttg tattatactg aattcacccc cactgaaaaa 360

gatgagtatg cctgccgtgt gaaccacgtg actttgtcac agcccaagat agttaagtgg 420

gatcgagaca tgtagtga 438

<210> 80
<211> 227
<212> PRT
<213> Homo sapiens

<400> 80

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pro Gly Lys
225
```

<210> 81
<211> 227
<212> PRT
<213> Homo sapiens

<400> 81

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Pro Gly Lys
225
```

<210> 82
<211> 227
<212> PRT
<213> Homo sapiens

<400> 82

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

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

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

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

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

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

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

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

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

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

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

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

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


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


Pro Gly Lys
225
```

<210> 83
<211> 227
<212> PRT
<213> Homo sapiens

<400> 83

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


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


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


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


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


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


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


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

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

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

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

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

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

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

Pro Gly Lys
225
```

<210> 84
<211> 133
<212> PRT
<213> Homo sapiens

<400> 84

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

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

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

Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys
```

50 55 60

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

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

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

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

Ile Ser Thr Leu Thr
130

<210> 85
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 85

Gly Ser Gly Gly Ser
1 5

<210> 86
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 86

Gly Gly Gly Ser
1

<210> 87
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Peptide

<400> 87

Tyr Met Leu Asp Leu Gln Pro Glu Thr
1 5

<210> 88
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 88

Phe His His Thr
1

<210> 89
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 89

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 90
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 90

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 91
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 91

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser
20 25

<210> 92
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 92

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 93
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 93

Gly Ser Ser Ser Ser Gly Ser Ser Ser Ser Gly Ser Ser Ser Ser Gly
1 5 10 15

Ser Ser Ser Ser
20

<210> 94
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<400> 94

Gly Ser Ser Ser Ser Gly Ser Ser Ser Ser Gly Ser Ser Ser Ser Gly
1 5 10 15

Ser Ser Ser Ser Gly Ser Ser Ser Ser
20 25

<210> 95
<211> 119
<212> PRT
<213> Homo sapiens

<400> 95

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
1 5 10 15

Gly Leu Glu Ala Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg
20 25 30

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

Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu
50 55 60

```
Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp
65                  70                  75                  80


Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp
                85                  90                  95


Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile
            100                 105                 110


Val Lys Trp Asp Arg Asp Met
        115


<210>  96
<211>  119
<212>  PRT
<213>  Pan troglodytes

<400>  96

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
1               5                   10                  15


Gly Leu Glu Ala Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg
            20                  25                  30


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


Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu
    50                  55                  60


Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp
65                  70                  75                  80


Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp
                85                  90                  95


Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile
```

100 105 110

Val Lys Trp Asp Arg Asp Met
115

<210> 97
<211> 119
<212> PRT
<213> Macaca mulatta

<400> 97

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
1 5 10 15

Gly Leu Glu Ala Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg
20 25 30

His Pro Pro Glu Asn Gly Lys Pro Asn Phe Leu Asn Cys Tyr Val Ser
35 40 45

Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu
50 55 60

Lys Met Gly Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp
65 70 75 80

Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Asn Glu Lys Asp
85 90 95

Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gly Pro Arg Thr
100 105 110

Val Lys Trp Asp Arg Asp Met
115

<210> 98
<211> 118
<212> PRT
<213> Bos Taurus

<400> 98

Met Ala Arg Phe Val Ala Leu Val Leu Leu Gly Leu Leu Ser Leu Ser
1   5   10   15

Gly Leu Asp Ala Ile Gln Arg Pro Pro Lys Ile Gln Val Tyr Ser Arg
            20   25   30

His Pro Pro Glu Asp Gly Lys Pro Asn Tyr Leu Asn Cys Tyr Val Tyr
        35   40   45

Gly Phe His Pro Pro Gln Ile Glu Ile Asp Leu Leu Lys Asn Gly Glu
    50   55   60

Lys Ile Lys Ser Glu Gln Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser
65   70   75   80

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

Tyr Ser Cys Arg Val Lys His Val Thr Leu Glu Gln Pro Arg Ile Val
            100   105   110

Lys Trp Asp Arg Asp Leu
        115

<210> 99
<211> 119
<212> PRT
<213> Mus musculus

<400> 99

Met Ala Arg Ser Val Thr Leu Val Phe Leu Val Leu Val Ser Leu Thr
1   5   10   15

Gly Leu Tyr Ala Ile Gln Lys Thr Pro Gln Ile Gln Val Tyr Ser Arg
            20   25   30

His Pro Pro Glu Asn Gly Lys Pro Asn Ile Leu Asn Cys Tyr Val Thr
        35   40   45

Gln Phe His Pro Pro His Ile Glu Ile Gln Met Leu Lys Asn Gly Lys
    50   55   60

Lys Ile Pro Lys Val Glu Met Ser Asp Met Ser Phe Ser Lys Asp Trp
65   70   75   80

Ser Phe Tyr Ile Leu Ala His Thr Glu Phe Thr Pro Thr Glu Thr Asp
                85   90   95

Thr Tyr Ala Cys Arg Val Lys His Ala Ser Met Ala Glu Pro Lys Thr
            100   105   110

Val Tyr Trp Asp Arg Asp Met
        115

<210> 100
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic Sequence

<220>
<221> Misc_Feature
<222> (4)..(4)
<223> Xaa is an amino acid other than Proline

<400> 100

Val Pro Gly Xaa Gly
1   5