

SEQUENCE LISTING

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<151> 2016-08-05

<160> 113

<170> PatentIn version 3.5

<210> 1

<211> 118

<212> PRT

<213> Mus musculus

<400> 1

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

Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Asp Phe Ser Asn Phe
20 25 30

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

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

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

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr

100

105

110

Ser Val Thr Val Ser Ser
115

<210> 2
<211> 119
<212> PRT
<213> Mus musculus

<400> 2

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

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

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

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

Lys Gly Lys Ala Thr Leu Thr Val Asp Thr Ser Ser Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Trp Ser Lys Asp Tyr Tyr Gly Met Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr Val Ser Ser
115

<210> 3
<211> 117
<212> PRT
<213> Mus musculus

<400> 3

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

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

Trp Ile Thr Trp Val Lys Asp Arg Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45

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

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

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

Ala Arg Asp Gly Arg Gly Tyr Phe Asp Tyr Trp Gly Pro Gly Thr Thr
 100 105 110

Leu Thr Val Ser Ser
 115

<210> 4

<211> 118

<212> PRT

<213> Mus musculus

<400> 4

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

Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Thr Tyr
 20 25 30

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

Gly Val Ile Trp Gly Gly Gly Asn Thr Asn Tyr Asn Ser Ala Leu Met
 50 55 60

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

Lys Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Met Tyr Tyr Cys Ala
 85 90 95

Lys His Lys Gly Thr Ser His Ala Met Glu Tyr Trp Gly Gln Gly Thr
 100 105 110

Ser Val Thr Val Ser Ser
 115

<210> 5
 <211> 119
 <212> PRT
 <213> Mus musculus

<400> 5

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

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Phe
 20 25 30

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

Trp Leu Ala His Ile Trp Trp Asp Asp Asp Lys Tyr Tyr His Pro Ala
 50 55 60

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

Phe Leu Lys Ile Ala Asn Val Asp Thr Ala Glu Thr Ala Thr Phe Tyr
85 90 95

Cys Ala Arg Val Glu Arg Gly Tyr Pro Leu Asp His Trp Gly Gln Gly
100 105 110

Thr Thr Leu Arg Val Ser Ser
115

<210> 6
<211> 121
<212> PRT
<213> Mus musculus

<400> 6

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

Ser Leu Ser Leu Thr Cys Thr Val Thr Gly Tyr Ser Ile Thr Ser Asp
20 25 30

Tyr Asp Trp His Trp Ile Arg His Phe Pro Gly Asn Lys Leu Glu Trp
35 40 45

Met Gly Tyr Ile Ser Tyr Ser Gly Ser Thr Lys Tyr Asn Pro Ser Leu
50 55 60

Lys Ser Arg Ile Ser Ile Thr His Asp Thr Ser Lys Asn His Phe Phe
65 70 75 80

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

Ala Arg Glu Asn Asp Phe Pro Gly Phe Trp Tyr Phe Asp Val Trp Gly
100 105 110

Thr Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 7
 <211> 118
 <212> PRT
 <213> Mus musculus

<400> 7

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

Ser Leu Ser Leu Thr Cys Thr Val Thr Gly Tyr Ser Ile Thr Ser Asp
 20 25 30

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

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

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

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

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

Thr Leu Thr Val Ser Ser
 115

<210> 8
 <211> 119
 <212> PRT
 <213> Mus musculus

<400> 8

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

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

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

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

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

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

Tyr Cys Thr Glu Gly Asp Tyr Asp Ile Phe Ala Tyr Trp Gly Gln Gly
 100 105 110

Thr Leu Val Thr Val Ser Ala
 115

<210> 9
 <211> 118
 <212> PRT
 <213> Mus musculus

<400> 9

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

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

Tyr Ile Asn Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
 35 40 45

Gly Asp Asn Asn Pro Asn Asn Gly Gly Ala Ser Tyr Asn Gln Ser Phe

50

55

60

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

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

Ala Arg Pro Glu Arg Tyr Trp Tyr Phe Asp Ala Trp Gly Thr Gly Thr
 100 105 110

Thr Val Thr Val Ser Ser
 115

<210> 10
 <211> 124
 <212> PRT
 <213> Mus musculus

<400> 10

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

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

Phe Met Asn Trp Val Met Gln Ser His Gly Lys Ser Leu Glu Trp Ile
 35 40 45

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

Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Asn Thr Ala His
 65 70 75 80

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

Ala Gly Pro Arg Ile Gly Gly Asp Tyr Asp Gly Gly Ser Trp Leu Ala
 100 105 110

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala
 115 120

<210> 11
 <211> 114
 <212> PRT
 <213> Mus musculus

<400> 11

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

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

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

Gly Asp Ile Asp Pro His Asn Gly Val Thr Leu Tyr Asn Gln Lys Phe
 50 55 60

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

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

Ala Leu Thr Gly Ser Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
 100 105 110

Ser Ala

<210> 12
 <211> 120
 <212> PRT

<213> Mus musculus

<400> 12

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

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

Lys Ile Asn Trp Val Lys Gln Asn Asn Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

Thr Thr Trp Asp Asp Tyr Ser Phe Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 13

<211> 118

<212> PRT

<213> Mus musculus

<400> 13

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

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

Tyr Ile His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
 35 40 45

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

Gln Asp Lys Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Val Tyr
 65 70 75 80

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

Thr Arg Gly Trp Asp Gly Tyr Tyr Phe Asp Cys Trp Gly Gln Gly Thr
 100 105 110

Thr Leu Thr Val Ser Ser
 115

<210> 14
 <211> 118
 <212> PRT
 <213> Mus musculus

<400> 14

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

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

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

Gly Trp Ile Asp Pro Ala Asp Gly His Thr Lys Tyr Asp Pro Lys Phe
 50 55 60

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

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

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

Thr Leu Thr Val Ser Ser
 115

<210> 15
 <211> 107
 <212> PRT
 <213> Mus musculus

<400> 15

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

Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
 20 25 30

Leu Ala Trp Phe Gln Gln Lys Gln Gly Lys Ser Pro His Phe Leu Val
 35 40 45

Tyr Ser Ala Lys Ala Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

Glu Asp Phe Gly Thr Tyr Tyr Cys Gln His Phe Trp Ser Ser Pro Tyr
 85 90 95

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

<210> 16

<211> 107
 <212> PRT
 <213> Mus musculus

<400> 16

Asp Ile Val Leu Thr Gln Ser His Lys Phe Met Ser Thr Ser Val Gly
 1 5 10 15

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

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

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

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

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

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

<210> 17
 <211> 107
 <212> PRT
 <213> Mus musculus

<400> 17

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

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

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Met

35

40

45

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

Arg Gly Ser Gly Ala Asp Tyr Ser Leu Thr Ile Asn Asn Leu Glu Gln
 65 70 75 80

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

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

<210> 18
 <211> 106
 <212> PRT
 <213> Mus musculus

<400> 18

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

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Arg Val Ile Phe Met
 20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Arg Leu Leu Ile Tyr
 35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
 65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Pro Thr
 85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
 100 105

<210> 19
 <211> 111
 <212> PRT
 <213> Mus musculus

<400> 19

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

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
 20 25 30

Ser Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 35 40 45

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

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

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

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

<210> 20
 <211> 110
 <212> PRT
 <213> Mus musculus

<400> 20

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

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Thr Val Arg Ile Ser
20 25 30

Ser Tyr Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Lys Tyr Ala Ser Asn Leu Glu Ser Gly Val Pro Ala
50 55 60

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

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

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

<210> 21
<211> 111
<212> PRT
<213> Mus musculus

<400> 21

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

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

Ser His Ser Tyr Leu His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

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

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

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

Glu Ile Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105 110

<210> 22
 <211> 111
 <212> PRT
 <213> Mus musculus

<400> 22

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

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Ser
 20 25 30

Thr Tyr Ser Tyr Ile His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 35 40 45

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

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

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

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

<210> 23
 <211> 107
 <212> PRT
 <213> Mus musculus

<400> 23

Asp Ile Val Met Thr Gln Ser Gln Lys Phe Met Ser Thr Thr Val Gly
1 5 10 15

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

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

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

Ser Gly Tyr Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Met Gln Ser
65 70 75 80

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

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 24

<211> 112

<212> PRT

<213> Mus musculus

<400> 24

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

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

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

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

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

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

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

<210> 25

<211> 107

<212> PRT

<213> Mus musculus

<400> 25

Asp Ile Val Met Thr Gln Ser Gln Lys Phe Met Ser Thr Ser Val Gly
 1 5 10 15

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

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

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

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

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

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

<210> 26

<211> 107
 <212> PRT
 <213> Mus musculus

<400> 26

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

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

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
 35 40 45

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

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

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

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

<210> 27
 <211> 108
 <212> PRT
 <213> Mus musculus

<400> 27

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

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

Leu His Trp Tyr Gln Gln Lys Ser His Glu Ser Pro Arg Leu Leu Ile

35

40

45

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

Ser Gly Ser Gly Thr Asp Phe Ile Leu Ser Ile Asn Ser Val Glu Thr
 65 70 75 80

Glu Asp Phe Gly Met Tyr Phe Cys Gln Gln Ser Asn Asn Trp Pro Arg
 85 90 95

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

<210> 28
 <211> 113
 <212> PRT
 <213> Mus musculus

<400> 28

Asp Ile Val Met Ser Gln Ser Pro Ser Ser Gln Val Val Ser Val Gly
 1 5 10 15

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

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val
 50 55 60

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

Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
 85 90 95

Tyr Tyr Ser Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
 100 105 110

Lys

<210> 29
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 29

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 30
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 30

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 31
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 31

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Asp Phe Ser Asn Phe
20 25 30

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 32

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 32

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 33

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 33

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 34

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 34

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 35
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 35

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 36
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 36

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 37
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 37

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 38

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 38

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 39

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 39

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 40
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 40

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Val Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 42
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 42

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 43
<211> 118
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 43

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

Ser Val Lys Val Ser Cys Lys Gly Ser Gly Tyr Asp Phe Ser Asn Phe
 20 25 30

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

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

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

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 44

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 44

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 45

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 45

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

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

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

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

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

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 46

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 46

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

Ser Val Lys Val Ser Cys Lys Gly Ser Gly Tyr Asp Phe Ser Asn Phe
 20 25 30

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 48
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 48

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

Ser Val Lys Val Ser Cys Lys Gly Ser Gly Tyr Asp Phe Ser Asn Phe
20 25 30

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 49
<211> 118

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 49

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 50
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 50

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

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

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

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

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

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 51
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 51

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 52
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 52

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 53

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 53

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 54
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 54

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

Ser Val Lys Val Ser Cys Lys Gly Ser Gly Tyr Asp Phe Ser Asn Phe
 20 25 30

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 55
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 55

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 56
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 56

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 57

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 57

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 58

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 58

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 59

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 59

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 60
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 60

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser
 115

<210> 61
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 61

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

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

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

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

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

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

Ala Arg Asp Asp Tyr Leu Arg Ala Met Asp Ile Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 62
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 62

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

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

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

Tyr Ser Ala Lys Arg Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 63

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 63

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

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

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

Tyr Ser Ala Lys Arg Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 64

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 64

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

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

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 65
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 65

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

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

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 66
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 66

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

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

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

Tyr	Ser	Ala	Lys	Arg	Leu	Glu	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55					60				

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

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

Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys
			100					105		

<210> 67

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 67

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 69
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 69

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Leu
 35 40 45

Tyr Ser Ala Lys Arg Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 70
 <211> 107

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 70

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Leu
 35 40 45

Tyr Ser Ala Lys Arg Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 71
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 71

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Leu
 35 40 45

Tyr Ser Ala Lys Arg Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

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

<210> 72

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 72

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

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

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 73

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 73

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

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

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

Tyr Ser Ala Lys Arg Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 74
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 74

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

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

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 75
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 75

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

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

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

Tyr Ser Ala Lys Arg Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 76

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 76

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Leu
 35 40 45

Tyr Ser Ala Lys Arg Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 77

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 77

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Leu
35 40 45

Tyr Ser Ala Lys Arg Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 78
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 78

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Leu
 35 40 45

Tyr Ser Ala Lys Arg Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

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

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

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

<210> 79
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 79

Gly Tyr Asp Phe Ser Asn Phe
1 5

<210> 80
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 80

Tyr Pro Gly Asp Gly Glu
1 5

<210> 81
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 81

Asp Asp Tyr Leu Arg Ala Met Asp Tyr
1 5

<210> 82
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 82

Gly Tyr Thr Phe Ser Asn Phe
1 5

<210> 83
<211> 7
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 83

Gly Gly Asp Phe Ser Asn Phe
1 5

<210> 84

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 84

Ile Pro Gly Asp Gly Glu
1 5

<210> 85

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 85

Tyr Pro Ile Asp Gly Glu
1 5

<210> 86

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 86

Tyr Pro Gly Asp Gly Thr
1 5

<210> 87
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 87

Gly Tyr Asp Phe Ser Ser Tyr
 1 5

<210> 88
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 88

Gly Tyr Asp Phe Ser Ser Phe
 1 5

<210> 89
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 89

Gly Tyr Asp Phe Ser Asn Tyr
 1 5

<210> 90
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 90

Tyr Pro Gly Phe Gly Glu
1 5

<210> 91

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 91

Asp Asp Tyr Leu Arg Ala Met Asp Val
1 5

<210> 92

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 92

Asp Asp Tyr Leu Arg Ala Met Asp Ile
1 5

<210> 93

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 93

Arg Ala Ser Gly Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 94
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 94

Ser Ala Lys Arg Leu Glu Ser
 1 5

<210> 95
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 95

Gln His Phe Trp Ser Ser Pro Tyr Thr
 1 5

<210> 96
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 96

Arg Ala Ser Gly Asn Ile His Asn Ser Leu Ala
 1 5 10

<210> 97
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 97

Ala Ala Ser Arg Leu Glu Ser
1 5

<210> 98

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 98

Ser Ala Ser Arg Leu Glu Ser
1 5

<210> 99

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 99

Arg Ala Ser Gly Gly Ile His Asn Tyr Leu Ala
1 5 10

<210> 100

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 100

Arg Ala Ser Gln Asn Ile His Asn Tyr Leu Ala
1 5 10

<210> 101

<211> 11

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 101

Arg Ala Ser Gly Asn Ile Ser Asn Tyr Leu Ala
 1 5 10

<210> 102
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 102

Ser Ala Lys Arg Leu Ala Ser
 1 5

<210> 103
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 103

Ser Ala Lys Arg Leu Glu Asp
 1 5

<210> 104
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 104

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

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

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

Gly Tyr Ile Trp Gly Gly Gly Asn Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Lys Gly Thr Ser His Ala Met Glu Tyr Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 105

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 105

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Ser Arg Val Ile Phe Leu
20 25 30

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

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

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

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

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 106

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 106

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

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

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

Gly Val Ile Trp Gly Gly Gly Asn Thr Asn Tyr Asn Ser Ser Leu Lys
 50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Lys His Lys Gly Thr Ser His Ala Met Glu Tyr Trp Gly Gln Gly Thr
 100 105 110

Met Val Thr Val Ser Ser
 115

<210> 107
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 107

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Ser Arg Val Ile Phe Met
 20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Leu Leu Ile Tyr
 35 40 45

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

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
 65 70 75 80

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

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 108
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 108

Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val
 1 5 10 15

Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser
 20 25 30

Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe
 35 40 45

Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr
 50 55 60

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

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

Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp
 100 105 110

Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly
 115 120 125

Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr
 130 135 140

Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser
 145 150 155 160

Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln
 165 170 175

Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu
 180 185 190

His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro
 195 200 205

Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala
 210 215 220

Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro
 225 230 235 240

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

Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu
 260 265 270

Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp
 275 280 285

Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu
 290 295 300

Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys
 305 310 315 320

Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser
 325 330 335

Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu
 340 345 350

Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser
 355 360 365

Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys Lys Ser Ala

370

375

380

Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
 385 390 395 400

Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
 405 410 415

Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
 420 425 430

Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
 435 440 445

Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys
 450 455 460

Ile Pro Lys
 465

<210> 109
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> Xaa = Gly or Tyr

<220>
 <221> MISC_FEATURE
 <222> (3)..(3)
 <223> Xaa = Lys or Thr

<220>
 <221> MISC_FEATURE
 <222> (6)..(6)
 <223> Xaa = Trp or Ser or Tyr

<220>
 <221> MISC_FEATURE
 <222> (7)..(7)
 <223> Xaa = Phe or Tyr

<400> 109

Gly Xaa Xaa Phe Ser Xaa Xaa
 1 5

<210> 110
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MISC_FEATURE
 <222> (3)..(3)
 <223> Xaa = Gly or Ile

<220>
 <221> MISC_FEATURE
 <222> (4)..(4)
 <223> Xaa = Asp or Phe

<400> 110

Tyr Pro Xaa Xaa Gly Glu
 1 5

<210> 111
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<220>
 <221> MISC_FEATURE
 <222> (8)..(8)
 <223> Xaa = Tyr or Ile or Val

<400> 111

Asp Tyr Leu Arg Ala Met Asp Xaa
1 5

<210> 112

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MISC_FEATURE

<222> (4)..(4)

<223> Xaa = Gly or Gln

<220>

<221> MISC_FEATURE

<222> (5)..(5)

<223> Xaa = Asn or Gly

<220>

<221> MISC_FEATURE

<222> (7)..(7)

<223> Xaa = His or Ser

<400> 112

Arg Ala Ser Xaa Xaa Ile Xaa Asn Tyr Leu Ala
1 5 10

<210> 113

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Xaa = Ser or Ala

<220>
 <221> MISC_FEATURE
 <222> (3)..(3)
 <223> Xaa = Lys or Ser

<220>
 <221> MISC_FEATURE
 <222> (6)..(6)
 <223> Xaa = Glu or Ala

<220>
 <221> MISC_FEATURE
 <222> (7)..(7)
 <223> Xaa = Ser or Asp

<400> 113

Xaa Ala Xaa Arg Leu Xaa Xaa
 1 5