

1
SEQUENCE LISTING

<110> CHUGAI SEIYAKU KABUSHIKI KAISHA

<120> Anti-CD137 antigen-binding molecules and uses thereof

<130> C1-A1821P

<150> JP 2018-152126

<151> 2018-08-10

<160> 225

<170> PatentIn version 3.5

<210> 1

<211> 255

<212> PRT

<213> Homo sapiens

<400> 1

Met Gly Asn Ser Cys Tyr Asn Ile Val Ala Thr Leu Leu Leu Val Leu
1 5 10 15

Asn Phe Glu Arg Thr Arg Ser Leu Gln Asp Pro Cys Ser Asn Cys Pro
20 25 30

Ala Gly Thr Phe Cys Asp Asn Asn Arg Asn Gln Ile Cys Ser Pro Cys
35 40 45

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

Cys Arg Gln Cys Lys Gly Val Phe Arg Thr Arg Lys Glu Cys Ser Ser
65 70 75 80

Thr Ser Asn Ala Glu Cys Asp Cys Thr Pro Gly Phe His Cys Leu Gly
85 90 95

Ala Gly Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu
100 105 110

Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln
115 120 125

Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys
130 135 140

Ser Val Leu Val Asn Gly Thr Lys Glu Arg Asp Val Val Cys Gly Pro
145 150 155 160

Ser Pro Ala Asp Leu Ser Pro Gly Ala Ser Ser Val Thr Pro Pro Ala
165 170 175

Pro Ala Arg Glu Pro Gly His Ser Pro Gln Ile Ile Ser Phe Phe Leu
180 185 190

Ala Leu Thr Ser Thr Ala Leu Leu Phe Leu Leu Phe Phe Leu Thr Leu
195 200 205

Arg Phe Ser Val Val Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe
210 215 220

Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly
225 230 235 240

Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
245 250 255

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

<400> 2

Ser Leu Gln Asp Pro Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp
1 5 10 15

Asn Asn Arg Asn Gln Ile Cys Ser Pro Cys Pro Pro Asn Ser Phe Ser
20 25 30

Ser Ala Gly Gly Gln Arg Thr Cys Asp Ile Cys Arg Gln Cys Lys Gly
35 40 45

Val Phe Arg Thr Arg Lys Glu Cys Ser Ser Thr Ser Asn Ala Glu Cys
50 55 60

Asp Cys Thr Pro Gly Phe His Cys Leu Gly Ala Gly Cys Ser Met Cys
65 70 75 80

Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu Thr Lys Lys Gly Cys Lys
85 90 95

Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln Lys Arg Gly Ile Cys Arg
100 105 110

Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys Ser Val Leu Val Asn Gly
115 120 125

Thr Lys Glu Arg Asp Val Val Cys Gly Pro Ser Pro Ala Asp Leu Ser
130 135 140

Pro Gly Ala Ser Ser Val Thr Pro Pro Ala Pro Ala Arg Glu Pro Gly
145 150 155 160

His Ser Pro Gln

<210> 3

<211> 256
 <212> PRT
 <213> Mus musculus

<400> 3

Met Gly Asn Asn Cys Tyr Asn Val Val Val Ile Val Leu Leu Leu Val
 1 5 10 15

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

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

Pro Ser Thr Phe Ser Ser Ile Gly Gly Gln Pro Asn Cys Asn Ile Cys
 50 55 60

Arg Val Cys Ala Gly Tyr Phe Arg Phe Lys Lys Phe Cys Ser Ser Thr
 65 70 75 80

His Asn Ala Glu Cys Glu Cys Ile Glu Gly Phe His Cys Leu Gly Pro
 85 90 95

Gln Cys Thr Arg Cys Glu Lys Asp Cys Arg Pro Gly Gln Glu Leu Thr
 100 105 110

Lys Gln Gly Cys Lys Thr Cys Ser Leu Gly Thr Phe Asn Asp Gln Asn
 115 120 125

Gly Thr Gly Val Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Arg
 130 135 140

Ser Val Leu Lys Thr Gly Thr Thr Glu Lys Asp Val Val Cys Gly Pro
 145 150 155 160

Pro Val Val Ser Phe Ser Pro Ser Thr Thr Ile Ser Val Thr Pro Glu
 165 170 175

Gly Gly Pro Gly Gly His Ser Leu Gln Val Leu Thr Leu Phe Leu Ala
 180 185 190

Leu Thr Ser Ala Leu Leu Leu Ala Leu Ile Phe Ile Thr Leu Leu Phe
 195 200 205

Ser Val Leu Lys Trp Ile Arg Lys Lys Phe Pro His Ile Phe Lys Gln
 210 215 220

Pro Phe Lys Lys Thr Thr Gly Ala Ala Gln Glu Glu Asp Ala Cys Ser
 225 230 235 240

Cys Arg Cys Pro Gln Glu Glu Glu Gly Gly Gly Gly Tyr Glu Leu
 245 250 255

<210> 4
 <211> 165
 <212> PRT
 <213> Mus musculus

<400> 4

Ala Val Gln Asn Ser Cys Asp Asn Cys Gln Pro Gly Thr Phe Cys Arg
 1 5 10 15

Lys Tyr Asn Pro Val Cys Lys Ser Cys Pro Pro Ser Thr Phe Ser Ser
 20 25 30

Ile Gly Gly Gln Pro Asn Cys Asn Ile Cys Arg Val Cys Ala Gly Tyr
 35 40 45

Phe Arg Phe Lys Lys Phe Cys Ser Ser Thr His Asn Ala Glu Cys Glu
 50 55 60

Cys Ile Glu Gly Phe His Cys Leu Gly Pro Gln Cys Thr Arg Cys Glu
 65 70 75 80

Lys Asp Cys Arg Pro Gly Gln Glu Leu Thr Lys Gln Gly Cys Lys Thr
 85 90 95

Cys Ser Leu Gly Thr Phe Asn Asp Gln Asn Gly Thr Gly Val Cys Arg
 100 105 110

Pro Trp Thr Asn Cys Ser Leu Asp Gly Arg Ser Val Leu Lys Thr Gly
 115 120 125

Thr Thr Glu Lys Asp Val Val Cys Gly Pro Pro Val Val Ser Phe Ser
 130 135 140

Pro Ser Thr Thr Ile Ser Val Thr Pro Glu Gly Gly Pro Gly Gly His
 145 150 155 160

Ser Leu Gln Val Leu
 165

<210> 5
 <211> 254
 <212> PRT
 <213> Macaca fascicularis

<400> 5

Met Gly Asn Ser Cys Tyr Asn Ile Val Ala Thr Leu Leu Leu Val Leu
 1 5 10 15

Asn Phe Glu Arg Thr Arg Ser Leu Gln Asp Leu Cys Ser Asn Cys Pro
 20 25 30

Ala Gly Thr Phe Cys Asp Asn Asn Arg Ser Gln Ile Cys Ser Pro Cys
 35 40 45

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

Cys Arg Gln Cys Lys Gly Val Phe Lys Thr Arg Lys Glu Cys Ser Ser
65 70 75 80

Thr Ser Asn Ala Glu Cys Asp Cys Ile Ser Gly Tyr His Cys Leu Gly
85 90 95

Ala Glu Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu
100 105 110

Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln
115 120 125

Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys
130 135 140

Ser Val Leu Val Asn Gly Thr Lys Glu Arg Asp Val Val Cys Gly Pro
145 150 155 160

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

Pro Ala Arg Glu Pro Gly His Ser Pro Gln Ile Ile Phe Phe Leu Ala
180 185 190

Leu Thr Ser Thr Val Val Leu Phe Leu Leu Phe Phe Leu Val Leu Arg
195 200 205

Phe Ser Val Val Lys Arg Ser Arg Lys Lys Leu Leu Tyr Ile Phe Lys
210 215 220

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

Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
245 250

<210> 6

<211> 165

<212> PRT

<213> Macaca fascicularis

<400> 6

Ser Leu Gln Asp Leu Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp
1 5 10 15

Asn Asn Arg Ser Gln Ile Cys Ser Pro Cys Pro Pro Asn Ser Phe Ser
20 25 30

Ser Ala Gly Gly Gln Arg Thr Cys Asp Ile⁶ Cys Arg Gln Cys Lys Gly
 35 40 45
 Val Phe Lys Thr Arg Lys Glu Cys Ser Ser Thr Ser Asn Ala Glu Cys
 50 55 60
 Asp Cys Ile Ser Gly Tyr His Cys Leu Gly Ala Glu Cys Ser Met Cys
 65 70 75 80
 Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu Thr Lys Lys Gly Cys Lys
 85 90 95
 Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln Lys Arg Gly Ile Cys Arg
 100 105 110
 Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys Ser Val Leu Val Asn Gly
 115 120 125
 Thr Lys Glu Arg Asp Val Val Cys Gly Pro Ser Pro Ala Asp Leu Ser
 130 135 140
 Pro Gly Ala Ser Ser Ala Thr Pro Pro Ala Pro Ala Arg Glu Pro Gly
 145 150 155 160
 His Ser Pro Gln Ile
 165

<210> 7
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Thr Phe Thr Met Asn
 1 5

<210> 8
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 <400> 8

Ser Ile Ser Ser Lys Ser Thr Tyr Ile Glu Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Val

<210> 9

<211> 17
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<400> 9

Ser Ile Ser Ser His Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Val

<210> 10
 <211> 17
 <212> PRT
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<400> 10

Ser Ile Ser Ser Ser Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Gly

<210> 11
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<220>
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<400> 11

Ser Ile Ser Ser Lys Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Val

<210> 12
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 12

Ser Ile Ser Ser Ser Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Leu

<210> 13
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 <212> PRT
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<220>
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 <400> 13

Ser Ile Ser Ser Lys Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Gly

<210> 14
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 <213> Artificial Sequence

<220>
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 <400> 14

Ser Ile Ser Ser Lys Gly Ser Tyr Ile Glu Tyr Ala Glu Gln Phe Lys
 1 5 10 15

Val

<210> 15
 <211> 17
 <212> PRT
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<220>
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 <400> 15

Ser Ile Ser Ser Lys Gly Ser Tyr Ile Glu Tyr Ala Glu Ser Phe Lys
 1 5 10 15

Val

<210> 16
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
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 <400> 16

Ser Ile Ser Ser Lys Gly Ser Tyr Ile Glu Tyr Ala Asp Ser Phe Lys
 1 5 10 15

Val

<210> 17
 <211> 13
 <212> PRT
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<220>
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<400> 17

Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr
 1 5 10

<210> 18
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 18

Tyr Gly Pro Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr
 1 5 10

<210> 19
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 19

Tyr Gly Lys Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr
 1 5 10

<210> 20
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 20

Tyr Gly Ile Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr
 1 5 10

<210> 21
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 21

Thr Gly Thr Arg Tyr Asp Val Gly Tyr Tyr Glu Tyr Val Ser
1 5 10

<210> 22

<211> 14

<212> PRT

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<400> 22

Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr Asn Tyr Val Ser
1 5 10

<210> 23

<211> 14

<212> PRT

<213> Artificial Sequence

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<400> 23

Thr Gly Thr Arg Thr Asp Val Gly Phe Tyr Glu Tyr Val Ser
1 5 10

<210> 24

<211> 14

<212> PRT

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<400> 24

Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr Glu Tyr Val Ser
1 5 10

<210> 25

<211> 14

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<400> 25

Thr Gly Thr Ser Thr Asp Val Gly Tyr Tyr Glu Tyr Val Ser
1 5 10

<210> 26

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<213> Artificial Sequence

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<223> An artificially synthesized sequence

<400> 26

Glu Thr Ser Lys Arg Leu Ser
1 5

<210> 27

<211> 10

<212> PRT

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<223> An artificially synthesized sequence

<400> 27

Ser Ser Tyr Arg Tyr Glu His Gln Val Ser
1 5 10

<210> 28

<211> 10

<212> PRT

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<223> An artificially synthesized sequence

<400> 28

Ser Ser Tyr Arg Tyr Pro His Ile Val Ser
1 5 10

<210> 29

<211> 10

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<220>

<223> An artificially synthesized sequence

<400> 29

Ser Ser Tyr Arg Tyr Glu Ala Gln Val Ser
1 5 10

<210> 30

<211> 17

<212> PRT

<213> Artificial Sequence

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<221> misc_feature

<222> (5)..(5)

<223> Xaa can be Lys, His or Ser

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa can be Ser or Gly

<220>

<221> misc_feature
 <222> (7)..(7)
 <223> Xaa can be Thr or Ser

<220>
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 <222> (10)..(10)
 <223> Xaa can Glu or Tyr

<220>
 <221> misc_feature
 <222> (13)..(13)
 <223> Xaa can be Asp or Glu

<220>
 <221> misc_feature
 <222> (14)..(14)
 <223> Xaa can be Ser or Gln

<220>
 <221> misc_feature
 <222> (17)..(17)
 <223> Xaa can be Val, Gly or Leu

<400> 30

Ser	Ile	Ser	Ser	Xaa	Xaa	Xaa	Tyr	Ile	Xaa	Tyr	Ala	Xaa	Xaa	Phe	Lys
1				5					10					15	

Xaa

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

<220>
 <223> An artificially synthesized sequence

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa can be Ala, Pro, Lys or Ile

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa can be Phe or Glu

<400> 31

Tyr	Gly	Xaa	Lys	Asn	Xaa	Leu	Asn	Trp	Val	Phe	Asp	Tyr
1				5					10			

<210> 32
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<220>

<221> misc_feature
 <222> (4)..(4)
 <223> Xaa can be Arg or Ser

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa can be Tyr or Thr

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> Xaa can be Tyr or Phe

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> Xaa can be Glu or Asn

<400> 32

Thr Gly Thr Xaa Xaa Asp Val Gly Xaa Tyr Xaa Tyr Val Ser
 1 5 10

<210> 33
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa can be Glu or Pro

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> Xaa can be His or Ala

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> Xaa can be Gln or Ile

<400> 33

Ser Ser Tyr Arg Tyr Xaa Xaa Xaa Val Ser
 1 5 10

<210> 34
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 34

Ser Ile Ser Ser Arg Ser Asn Tyr Lys Glu Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

<210> 35
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 35

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

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

<210> 36
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 36

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

<210> 37
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 37

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
 20 25 30

<210> 38
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 38

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

<210> 39

<211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 39

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

Thr Val Thr Ile Ser Cys
 20

<210> 40
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 40

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr
 1 5 10 15

<210> 41
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 41

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

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

<210> 42
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 42

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 1 5 10

<210> 43
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 43

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

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

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

Ser Ser Ile Ser Ser Lys Ser Thr Tyr Ile Glu Tyr Ala Asp Ser Phe
50 55 60

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

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

Ala Arg Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr Trp
100 105 110

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

<210> 44

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 44

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

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

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

Ser Ser Ile Ser Ser His Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe
50 55 60

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

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

Ala Arg Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr Trp
100 105 110

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

<210> 45

$\langle 210 \rangle$	19
$\langle 211 \rangle$	122

<212> PRT

<212> PRI

<213> Artificial Sequence

$\langle 220 \rangle$

<223> An artificially synthesized sequence

<400> 45

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

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

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

Ser Ser Ile Ser Ser Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe
50 55 60

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

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

Ala Arg Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr Trp
100 105 110

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

<210> 46

$\langle 210 \rangle$	40
$\langle 211 \rangle$	122

<212> PRT

<212>	PR1
<213>	Artificial Sequence

$\langle 220 \rangle$

<223> An artificially synthesized sequence

<400> 46

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

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

Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45 18
 Ser Ser Ile Ser Ser Lys Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe
 50 55 60
 Lys Val Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Pro Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 47
 <211> 122
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 47

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Phe
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Lys Ser Thr Tyr Ile Glu Tyr Ala Asp Ser Phe
 50 55 60
 Lys Val Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Pro Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 48
 <211> 122
 <212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 48

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

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

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

Ser Ser Ile Ser Ser Ser Ser Tyr Ile Glu Tyr Ala Asp Ser Phe
50 55 60

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

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

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

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

<210> 49

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 49

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

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

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

Ser Ser Ile Ser Ser Lys Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Phe
50 55 60

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

Leu Gln Met Asn Ser₈₅ Leu Arg Ala Glu Asp₉₀²⁰ Thr Ala Val Tyr Tyr Cys₉₅

Ala Arg Tyr Gly₁₀₀ Pro Lys Asn Glu Leu₁₀₅ Asn Trp Val Phe Asp₁₁₀ Tyr Trp

Gly Gln Gly₁₁₅ Thr Leu Val Thr Val₁₂₀ Ser Ser

<210> 50
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<212> PRT
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<220>
<223> An artificially synthesized sequence

<400> 50

Glu Val Gln Leu₅ Val Glu Ser Gly Gly₁₀ Gly Leu Val Lys Pro Gly Gly₁₅

Ser Leu Arg Leu₂₀ Ser Cys Ala Ala Ser₂₅ Gly Phe Thr Phe Ser₃₀ Thr Phe

Thr Met Asn Trp Val Arg Gln Ala₄₀ Pro Gly Lys Gly₄₅ Leu Glu Trp Val

Ser Ser₅₀ Ile Ser Ser Lys Gly₅₅ Ser Tyr Ile Glu Tyr₆₀ Ala Glu Gln Phe

Lys Val Arg Phe Thr Ile₇₀ Ser Arg Asp Asn Ala₇₅ Lys Asn Ser Leu Tyr₈₀

Leu Gln Met Asn Ser₈₅ Leu Arg Ala Glu Asp₉₀ Thr Ala Val Tyr Tyr Cys₉₅

Ala Arg Tyr Gly₁₀₀ Lys Lys Asn Glu Leu₁₀₅ Asn Trp Val Phe Asp₁₁₀ Tyr Trp

Gly Gln Gly₁₁₅ Thr Leu Val Thr Val₁₂₀ Ser Ser

<210> 51
<211> 122
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 51

Glu Val Gln Leu₅ Val Glu Ser Gly Gly₁₀ Gly Leu Val Lys Pro Gly Gly₁₅

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Phe

20 21 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Lys Gly Ser Tyr Ile Glu Tyr Ala Glu Ser Phe
 50 55 60
 Lys Val Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Ile Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120
 <210> 52
 <211> 122
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 52
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Phe
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Lys Gly Ser Tyr Ile Glu Tyr Ala Asp Ser Phe
 50 55 60
 Lys Val Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Ile Lys Asn Glu Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 53
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 53

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

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

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

Ser Ser Ile Ser Ser Lys Gly Ser Tyr Ile Glu Tyr Ala Glu Gln Phe
 50 55 60

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

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

Ala Arg Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

<210> 54
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 54

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu

65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
85 90 95

His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210>	55
<211>	110
<212>	PRT
<213>	Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 55

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
85 90 95

His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210>	56
<211>	110
<212>	PRT
<213>	Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 56

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Pro
85 90 95

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

<210> 57
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 57

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
85 90 95

Ala Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 58
<211> 110
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 58

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
 85 90 95

His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 59
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 59

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
 85 90 95

His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 60
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 60

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
85 90 95

His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 61

<211> 330

<212> PRT

<213> Homo sapiens

<400> 61

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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

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

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

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

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

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

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225 230 235 240

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
325 330

<210> 62
<211> 330
<212> PRT
<213> Homo sapiens

<400> 62

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

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

Phe Pro Glu₃₅ Pro Val Thr Val Ser₄₀ Trp Asn²⁸ Ser Gly Ala₄₅ Leu Thr Ser
 Gly Val₅₀ His Thr Phe Pro Ala₅₅ Val Leu Gln Ser Ser₆₀ Gly Leu Tyr Ser
 Leu Ser Ser Val Val Thr₇₀ Val Pro Ser Ser₇₅ Leu Gly Thr Gln Thr₈₀
 Tyr Ile Cys Asn₈₅ Asn His Lys Pro Ser₉₀ Asn Thr Lys Val Asp₉₅ Lys
 Arg Val Glu Pro₁₀₀ Lys Ser Cys Asp Lys₁₀₅ Thr His Thr Cys Pro₁₁₀ Pro Cys
 Pro Ala Pro₁₁₅ Glu Leu Leu Gly Gly₁₂₀ Pro Ser Val Phe Leu₁₂₅ Phe Pro Pro
 Lys Pro₁₃₀ Lys Asp Thr Leu Met₁₃₅ Ile Ser Arg Thr Pro₁₄₀ Glu Val Thr Cys
 Val₁₄₅ Val Val Asp Val Ser₁₅₀ His Glu Asp Pro Glu₁₅₅ Val Lys Phe Asn Trp₁₆₀
 Tyr Val Asp Gly Val₁₆₅ Glu Val His Asn Ala₁₇₀ Lys Thr Lys Pro Arg₁₇₅ Glu
 Glu Gln Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val Ser Val Leu Thr₁₉₀ Val Leu
 His Gln Asp₁₉₅ Trp Leu Asn Gly Lys₂₀₀ Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Lys Ala₂₁₀ Leu Pro Ala Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Pro Arg Glu Pro Gln₂₃₀ Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Glu Glu₂₄₀
 Met Thr Lys Asn Gln₂₄₅ Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe Tyr₂₅₅
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr₂₉₀ Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr

65					70					30 75				80
Tyr	Ile	Cys	Asn	Val ₈₅	Asn	His	Lys	Pro	Ser ₉₀	Asn	Thr	Lys	Val ₉₅	Lys
Lys	Val	Glu	Pro ₁₀₀	Lys	Ser	Cys	Asp	Lys ₁₀₅	Thr	His	Thr	Cys	Pro ₁₁₀	Cys
Pro	Ala	Pro ₁₁₅	Glu	Leu	Trp	Asn	Gly ₁₂₀	Pro	Ser	Val	Phe	Leu ₁₂₅	Phe	Pro
Lys	Pro ₁₃₀	Lys	Asp	Thr	Leu	Met ₁₃₅	Ile	Ser	Arg	Thr	Pro ₁₄₀	Glu	Val	Cys
Val ₁₄₅	Val	Val	Asp	Val	Ser ₁₅₀	Asp	Glu	Asp	Pro	Glu ₁₅₅	Val	Lys	Phe	Asn
Tyr	Val	Asp	Gly	Val ₁₆₅	Glu	Val	His	Asn	Ala ₁₇₀	Lys	Thr	Lys	Pro	Arg ₁₇₅
Glu	Leu	Tyr	Asn ₁₈₀	Ser	Thr	Tyr	Arg	Val ₁₈₅	Val	Ser	Val	Leu	Thr ₁₉₀	Val
His	Gln	Asp ₁₉₅	Trp	Leu	Asn	Gly	Lys ₂₀₀	Glu	Tyr	Lys	Cys	Lys ₂₀₅	Val	Ser
Thr	Ala ₂₁₀	Leu	Pro	Lys	Pro	Ile ₂₁₅	Glu	Lys	Thr	Ile	Ser ₂₂₀	Lys	Ala	Lys
Gln ₂₂₅	Arg	Arg	Glu	Pro	Gln ₂₃₀	Val	Tyr	Thr	Leu	Pro ₂₃₅	Pro	Ser	Arg	Glu
Met	Thr	Lys	Asn	Gln ₂₄₅	Val	Ser	Leu	Thr	Cys ₂₅₀	Leu	Val	Lys	Gly	Phe ₂₅₅
Pro	Ser	Asp	Ile ₂₆₀	Ala	Val	Glu	Trp	Glu ₂₆₅	Ser	Asn	Gly	Gln ₂₇₀	Pro	Glu
Asn	Tyr	Lys ₂₇₅	Thr	Thr	Pro	Pro	Val ₂₈₀	Leu	Asp	Ser	Asp	Gly ₂₈₅	Ser	Phe
Leu	Tyr ₂₉₀	Ser	Lys	Leu	Thr	Val ₂₉₅	Lys	Lys	Ser	Arg	Trp ₃₀₀	Gln	Gln	Gly
Val ₃₀₅	Phe	Ser	Cys	Ser	Val ₃₁₀	Met	His	Glu	Ala	Leu ₃₁₅	His	Asn	His	Tyr
														Thr ₃₂₀
Gln	Lys	Ser	Leu	Ser ₃₂₅	Leu	Ser	Pro							

<210> 65
<211> 328

<212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 65

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

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

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

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr

245 250³² 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Lys Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 66
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 66

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Tyr Leu Gly Gly Asp Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Val Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140

Val¹⁴⁵ Val Ile Asp Val¹⁵⁰ Ser¹⁵⁰ His Glu Asp³³ Pro¹⁵⁵ Glu¹⁵⁵ Val Lys Phe Asn Trp¹⁶⁰
 Tyr Val Asp Gly¹⁶⁵ Val¹⁶⁵ Glu Val His Asn¹⁷⁰ Ala¹⁷⁰ Lys Thr Lys Pro Arg¹⁷⁵ Glu
 Glu Gln Tyr Asn¹⁸⁰ Ser Thr Tyr Arg Val¹⁸⁵ Val Ser Val Leu¹⁹⁰ Pro Val Leu
 His Gln Asp¹⁹⁵ Trp Leu Asn Gly²⁰⁰ Lys Glu Tyr Lys Cys²⁰⁵ Lys Val Ser Asn
 Lys Ala²¹⁰ Leu Pro Lys Pro Ile²¹⁵ Glu Lys Thr Ile Ser²²⁰ Lys Ala Lys Gly
 Gln Arg Arg Glu Pro Gln²³⁰ Val Tyr Thr Leu Pro²³⁵ Pro Ser Arg Glu Glu²⁴⁰
 Met Thr Lys Asn²⁴⁵ Gln Val Ser Leu Thr Cys²⁵⁰ Leu Val Lys Gly Phe Tyr²⁵⁵
 Pro Ser Asp Ile²⁶⁰ Ala Val Glu Trp Glu²⁶⁵ Ser Asn Gly Gln Pro²⁷⁰ Glu Asn
 Asn Tyr Lys²⁷⁵ Thr Thr Pro Pro Val²⁸⁰ Leu Asp Ser Asp Gly²⁸⁵ Ser Phe Phe
 Leu Tyr Ser Lys Leu Thr Val²⁹⁵ Lys Lys Ser Arg Trp³⁰⁰ Gln Gln Gly Asn
 Val³⁰⁵ Phe Ser Cys Ser Val³¹⁰ Met His Glu Ala Leu³¹⁵ His Asn His Tyr Thr³²⁰
 Gln Lys Ser Leu Ser³²⁵ Leu Ser Pro

<210> 67
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 67

Ala Ser Thr Lys Gly⁵ Pro Ser Val Phe¹⁰ Pro Leu Ala Pro Ser¹⁵ Lys
 Ser Thr Ser Gly²⁰ Gly Thr Ala Ala Leu²⁵ Gly Cys Leu Val Lys³⁰ Asp Tyr
 Phe Pro Glu³⁵ Pro Val Thr Val Ser⁴⁰ Trp Asn Ser Gly⁴⁵ Ala Leu Thr Ser

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Tyr Leu Gly Asp Asp Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Val Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Pro Val Leu
 180 185 190
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Arg Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Lys Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 68
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 68

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 69
<211> 328
<212> PRT
<213> Artificial sequence

<220>
<223> An artificially synthesized sequence

<400> 69

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Tyr Leu Gly Gly Asp Ser Val Phe Leu Phe Pro Pro
115 120 125

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

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 70
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 70

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

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

Protein 1															
20				25				38				30			
Phe	Pro	Glu 35	Pro	Val	Thr	Val	Ser 40	Trp	Asn	Ser	Gly	Ala 45	Leu	Thr	Ser
Gly	Val 50	His	Thr	Phe	Pro	Ala 55	Val	Leu	Gln	Ser	Ser 60	Gly	Leu	Tyr	Ser
Leu 65	Ser	Ser	Val	Val	Thr 70	Val	Pro	Ser	Ser	Ser 75	Leu	Gly	Thr	Gln	Thr 80
Tyr	Ile	Cys	Asn	Val 85	Asn	His	Lys	Pro	Ser 90	Asn	Thr	Lys	Val	Asp 95	Lys
Lys	Val	Glu	Pro 100	Lys	Ser	Cys	Asp	Lys 105	Thr	His	Thr	Cys	Pro 110	Pro	Cys
Pro	Ala	Pro 115	Glu	Tyr	Leu	Gly	Asp 120	Asp	Ser	Val	Phe	Leu 125	Phe	Pro	Pro
Lys	Pro 130	Lys	Asp	Val	Leu	Met 135	Ile	Ser	Arg	Thr	Pro 140	Glu	Val	Thr	Cys
Val 145	Val	Val	Asp	Val	Ser 150	His	Glu	Asp	Pro	Glu 155	Val	Lys	Phe	Asn	Trp 160
Tyr	Val	Asp	Gly	Val 165	Glu	Val	His	Asn	Ala 170	Lys	Thr	Lys	Pro	Arg 175	Glu
Glu	Gln	Tyr	Asn 180	Ser	Thr	Tyr	Arg	Val 185	Val	Ser	Val	Leu	Pro 190	Val	Leu
His	Arg	Asp 195	Trp	Leu	Asn	Gly	Lys 200	Glu	Tyr	Lys	Cys	Lys 205	Val	Ser	Asn
Lys	Ala 210	Leu	Pro	Lys	Pro	Ile 215	Glu	Lys	Thr	Ile	Ser 220	Lys	Ala	Lys	Gly
Gln 225	Arg	Arg	Glu	Pro	Gln 230	Val	Tyr	Thr	Leu	Pro 235	Pro	Ser	Arg	Glu	Glu 240
Met	Thr	Lys	Asn	Gln 245	Val	Ser	Leu	Thr	Cys 250	Leu	Val	Lys	Gly	Phe 255	Tyr
Pro	Ser	Asp	Ile 260	Ala	Val	Glu	Trp	Glu 265	Ser	Asn	Gly	Gln	Pro 270	Glu	Asn
Asn	Tyr	Lys 275	Thr	Thr	Pro	Pro	Val 280	Leu	Asp	Ser	Asp	Gly 285	Ser	Phe	Phe
Leu	Tyr 290	Ser	Lys	Leu	Thr	Val 295	Asp	Lys	Ser	Arg	Trp 300	Gln	Gln	Gly	Asn

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

Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 71
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 71

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

195 200 40 205
 Thr Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Arg Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 72
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 72

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95

Arg Val Glu Pro₁₀₀ Lys Ser Cys Asp Lys₁₀₅ Thr⁴¹ His Thr Cys Pro₁₁₀ Pro Cys
 Pro Ala Pro₁₁₅ Glu Leu Trp Asn Gly₁₂₀ Pro Ser Val Phe Leu₁₂₅ Phe Pro Pro
 Lys Pro₁₃₀ Lys Asp Thr Leu Met₁₃₅ Ile Ser Arg Thr Pro₁₄₀ Glu Val Thr Cys
 Val₁₄₅ Val Val Asp Val₁₅₀ Ser Asp Glu Asp Pro₁₅₅ Val Lys Phe Asn Trp₁₆₀
 Tyr Val Asp Gly Val₁₆₅ Glu Val His Asn Ala₁₇₀ Lys Thr Lys Pro Arg₁₇₅ Glu
 Glu Leu Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val Ser Val Leu Thr₁₉₀ Val Leu
 His Gln Asp₁₉₅ Trp Leu Asn Gly Lys₂₀₀ Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Thr Ala₂₁₀ Leu Pro Lys Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Arg Arg Glu Pro Gln₂₃₀ Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Glu Glu₂₄₀
 Met Thr Lys Asn₂₄₅ Gln Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe₂₅₅ Tyr
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro₂₇₀ Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr₂₉₀ Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn
 Val₃₀₅ Phe Ser Cys Ser Val₃₁₀ Met His Glu Ala Leu₃₁₅ His Asn His Tyr Thr₃₂₀
 Gln Lys Ser Leu Ser₃₂₅ Leu Ser Pro

<210> 73
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 73

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Leu Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Thr Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Lys Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 74
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 74

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Leu Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 75
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 75

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

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

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

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

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

Tyr Ile Cys Asn Val₈₅ Asn His Lys Pro Ser₉₀ Asn Thr Lys Val₉₅ Asp Lys
 Arg Val Glu Pro₁₀₀ Lys Ser Cys Asp Lys₁₀₅ Thr His Thr Cys Pro₁₁₀ Pro Cys
 Pro Ala Pro₁₁₅ Glu Leu Trp Asn Gly₁₂₀ Pro Ser Val Phe Leu₁₂₅ Phe Pro Pro
 Lys Pro₁₃₀ Lys Asp Thr Leu Met₁₃₅ Ile Ser Arg Thr Pro₁₄₀ Glu Val Thr Cys
 Val₁₄₅ Val Val Asp Val₁₅₀ Ser Asp Glu Asp Pro Glu₁₅₅ Val Lys Phe Asn Trp₁₆₀
 Tyr Val Asp Gly Val₁₆₅ Glu Val His Asn Ala₁₇₀ Lys Thr Lys Pro Arg₁₇₅ Glu
 Glu Gln Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val Ser Val Leu Thr₁₉₀ Val Leu
 His Gln Asp₁₉₅ Trp Leu Asn Gly Lys₂₀₀ Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Lys Ala₂₁₀ Leu Pro Lys Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Arg Arg Glu Pro Gln₂₃₀ Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Glu Glu₂₄₀
 Met Thr Lys Asn₂₄₅ Gln Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe₂₅₅ Tyr
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro₂₇₀ Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr₂₉₀ Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn
 Val₃₀₅ Phe Ser Cys Ser Val₃₁₀ Met His Glu Ala Leu₃₁₅ His Asn His Tyr Thr₃₂₀
 Gln Lys Ser Leu Ser₃₂₅ Leu Ser Pro

<210> 76
 <211> 328
 <212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 76

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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

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

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

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

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

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

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

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

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

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

Leu Tyr Ser Lys Leu Thr Val Lys Lys Ser Arg Trp Gln Gln Gly Asn
290 295 300

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 77
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 77

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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

Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser⁴⁹ Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Arg Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Lys Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro

<210> 79
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 79

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Leu Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

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

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu⁵¹ Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 80
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 80

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 81
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 81

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

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Leu Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Arg Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Arg Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300

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

Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 82
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 82

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Arg Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 83
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 83

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro⁵⁷ Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Arg Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe

275 280 58 285
 Leu Tyr Ser Lys Leu Thr Val Lys Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325
 <210> 85
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 85
 Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175

Glu Leu Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val⁵⁹ Ser Val Leu Thr Val Leu
 His Arg Asp₁₉₅ Trp Leu Asn Gly Lys₂₀₀ Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Thr Ala₂₁₀ Leu Pro Lys Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Pro Arg Glu Pro Gln₂₃₀ Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Glu Glu₂₄₀
 Met Thr Lys Asn Gln₂₄₅ Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe Tyr₂₅₅
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr₂₉₀ Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn
 Val Phe Ser Cys Ser Val₃₁₀ Met His Glu Ala Leu₃₁₅ His Asn His Tyr Thr₃₂₀
 Gln Lys Ser Leu Ser₃₂₅ Leu Ser Pro

<210> 86
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence
 <400> 86

Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu
 1 5 10 15

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

<220>
 <223> An artificially synthesized sequence
 <400> 87

Met Gly Asn Ser Cys Tyr Asn Ile Val Ala Thr Leu Leu Leu Val Leu
 1 5 10 15

Asn Phe Glu Arg Thr Arg Ser Leu Gln Asp Pro Cys Ser Asn Cys Pro

20 25 60 30
 Ala Gly Thr Phe Cys Asp Asn Asn Arg Asn Gln Ile Cys Ser Pro Cys
 35 40 45
 Pro Pro Asn Ser Phe Ser Ser Ala Gly Gly Gln Arg Thr Cys Asp Ile
 50 55 60
 Cys Arg Gln Cys Lys Gly Val Phe Arg Thr Arg Lys Glu Cys Ser Ser
 65 70 75 80
 Thr Ser Asn Ala Glu Cys Asp Cys Thr Pro Gly Phe His Cys Leu Gly
 85 90 95
 Ala Gly Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu
 100 105 110
 Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln
 115 120 125
 Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys
 130 135 140
 Ser Val Leu Val Asn Gly Thr Lys Glu Arg Asp Val Val Cys Gly Pro
 145 150 155 160
 Ser Pro Ala Asp Leu Ser Pro Gly Ala Ser Ser Val Thr Pro Pro Ala
 165 170 175
 Pro Ala Arg Glu Pro Gly His Ser Pro Gln His His His His His His
 180 185 190
 Gly Gly Gly Gly Ser Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile
 195 200 205
 Glu Trp His Glu
 210

<210> 88
 <211> 641
 <212> PRT
 <213> Human gammaherpesvirus 4

<400> 88

Met Ser Asp Glu Gly Pro Gly Thr Gly Pro Gly Asn Gly Leu Gly Glu
 1 5 10 15
 Lys Gly Asp Thr Ser Gly Pro Glu Gly Ser Gly Gly Ser Gly Pro Gln
 20 25 30
 Arg Arg Gly Gly Asp Asn His Gly Arg Gly Arg Gly Arg Gly Arg Gly
 35 40 45

Arg Gly Gly Gly Arg Pro Gly Ala Pro Gly Gly Ser Gly Ser Gly Pro
 50 55 60
 Arg His Arg Asp Gly Val Arg Arg Pro Gln Lys Arg Pro Ser Cys Ile
 65 70 75 80
 Gly Cys Lys Gly Thr His Gly Gly Thr Gly Ala Gly Ala Gly Ala Gly
 85 90 95
 Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly
 100 105 110
 Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly
 115 120 125
 Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala
 130 135 140
 Gly Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly Ala Gly
 145 150 155 160
 Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly
 165 170 175
 Ala Gly Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly
 180 185 190
 Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly
 195 200 205
 Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala
 210 215 220
 Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala
 225 230 235 240
 Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly
 245 250 255
 Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly
 260 265 270
 Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Gly Ala Gly Ala Gly
 275 280 285
 Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly
 290 295 300
 Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly
 305 310 315 320

Gly Ala Gly Ala Gly₃₂₅ Gly Gly Gly Arg Gly⁶²₃₃₀ Arg Gly Gly Ser Gly₃₃₅ Gly
 Arg Gly Arg Gly₃₄₀ Gly Ser Gly Gly Arg₃₄₅ Gly Arg Gly Gly Ser₃₅₀ Gly Gly
 Arg Arg Gly₃₅₅ Arg Gly Arg Glu Arg₃₆₀ Ala Arg Gly Gly Ser₃₆₅ Arg Glu Arg
 Ala Arg₃₇₀ Gly Arg Gly Arg Gly₃₇₅ Arg Gly Glu Lys Arg₃₈₀ Pro Arg Ser Pro
 Ser₃₈₅ Ser Gln Ser Ser Ser₃₉₀ Ser Gly Ser Pro Pro₃₉₅ Arg Arg Pro Pro Pro₄₀₀
 Gly Arg Arg Pro Phe₄₀₅ Phe His Pro Val Gly₄₁₀ Glu Ala Asp Tyr Phe₄₁₅ Glu
 Tyr His Gln Glu₄₂₀ Gly Gly Pro Asp Gly₄₂₅ Glu Pro Asp Val Pro₄₃₀ Pro Gly
 Ala Ile Glu₄₃₅ Gln Gly Pro Ala Asp₄₄₀ Asp Pro Gly Glu Gly₄₄₅ Pro Ser Thr
 Gly Pro₄₅₀ Arg Gly Gln Gly Asp₄₅₅ Gly Gly Arg Arg Lys₄₆₀ Lys Gly Gly Trp
 Phe₄₆₅ Gly Lys His Arg Gly₄₇₀ Gln Gly Gly Ser Asn₄₇₅ Pro Lys Phe Glu Asn₄₈₀
 Ile Ala Glu Gly Leu₄₈₅ Arg Ala Leu Leu Ala₄₉₀ Arg Ser His Val Glu₄₉₅ Arg
 Thr Thr Asp Glu₅₀₀ Gly Thr Trp Val Ala₅₀₅ Gly Val Phe Val Tyr₅₁₀ Gly Gly
 Ser Lys Thr₅₁₅ Ser Leu Tyr Asn Leu₅₂₀ Arg Arg Gly Thr Ala₅₂₅ Leu Ala Ile
 Pro Gln₅₃₀ Cys Arg Leu Thr Pro₅₃₅ Leu Ser Arg Leu Pro₅₄₀ Phe Gly Met Ala
 Pro₅₄₅ Gly Pro Gly Pro Gln₅₅₀ Pro Gly Pro Leu Arg₅₅₅ Glu Ser Ile Val Cys₅₆₀
 Tyr Phe Met Val Phe₅₆₅ Leu Gln Thr His Ile₅₇₀ Phe Ala Glu Val Leu₅₇₅ Lys
 Asp Ala Ile Lys₅₈₀ Asp Leu Val Met Thr₅₈₅ Lys Pro Ala Pro Thr₅₉₀ Cys Asn
 Ile Arg Val Thr Val Cys Ser Phe Asp Asp Gly Val Asp Leu Pro Pro

595 600 63 605
 Trp Phe Pro Pro Met Val Glu Gly Ala Ala Ala Glu Gly Asp Asp Gly
 610 615 620
 Asp Asp Gly Asp Glu Gly Gly Asp Gly Asp Glu Gly Glu Glu Gly Gln
 625 630 635 640
 Glu

<210> 89
 <211> 399
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 89

Leu Gln Asp Pro Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp Asn
 1 5 10 15

Asn Arg Asn Gln Ile Cys Ser Pro Cys Pro Pro Asn Ser Phe Ser Ser
 20 25 30

Ala Gly Gly Gln Arg Thr Cys Asp Ile Cys Arg Gln Cys Lys Gly Val
 35 40 45

Phe Arg Thr Arg Lys Glu Cys Ser Ser Thr Ser Asn Ala Glu Cys Asp
 50 55 60

Cys Thr Pro Gly Phe His Cys Leu Gly Ala Gly Cys Ser Met Cys Glu
 65 70 75 80

Gln Asp Cys Lys Gln Gly Gln Glu Leu Thr Lys Lys Gly Cys Lys Asp
 85 90 95

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

Trp Thr Asn Cys Ser Leu Asp Gly Lys Ser Val Leu Val Asn Gly Thr
 115 120 125

Lys Glu Arg Asp Val Val Cys Gly Pro Ser Pro Ala Asp Leu Ser Pro
 130 135 140

Gly Ala Ser Ser Val Thr Pro Pro Ala Pro Ala Arg Glu Pro Gly His
 145 150 155 160

Ser Pro Gln Asp Ile Glu Gly Arg Met Asp Pro Lys Ser Cys Asp Lys
 165 170 175

Thr His Thr Cys₁₈₀ Pro Pro Cys Pro Ala₁₈₅ Pro⁶⁴ Glu Leu Leu Gly₁₉₀ Gly Pro
 Ser Val Phe₁₉₅ Leu Phe Pro Pro Lys₂₀₀ Pro Lys Asp Thr Leu₂₀₅ Met Ile Ser
 Arg Thr₂₁₀ Pro Glu Val Thr Cys₂₁₅ Val Val Val Asp Val₂₂₀ Ser His Glu Asp
 Pro₂₂₅ Glu Val Lys Phe Asn₂₃₀ Trp Tyr Val Asp Gly₂₃₅ Val Glu Val His Asn₂₄₀
 Ala Lys Thr Lys Pro₂₄₅ Arg Glu Glu Gln Tyr₂₅₀ Asn Ser Thr Tyr Arg₂₅₅ Val
 Val Ser Val Leu₂₆₀ Thr Val Leu His Gln₂₆₅ Asp Trp Leu Asn Gly₂₇₀ Lys Glu
 Tyr Lys Cys₂₇₅ Lys Val Ser Asn Lys₂₈₀ Ala Leu Pro Ala Pro₂₈₅ Ile Glu Lys
 Thr Ile₂₉₀ Ser Lys Ala Lys Gly₂₉₅ Gln Pro Arg Glu Pro₃₀₀ Gln Val Tyr Thr
 Leu₃₀₅ Pro Pro Ser Arg Asp₃₁₀ Glu Leu Thr Lys Asn₃₁₅ Gln Val Ser Leu Thr₃₂₀
 Cys Leu Val Lys Gly₃₂₅ Phe Tyr Pro Ser Asp₃₃₀ Ile Ala Val Glu Trp₃₃₅ Glu
 Ser Asn Gly Gln₃₄₀ Pro Glu Asn Asn Tyr₃₄₅ Lys Thr Thr Pro Pro₃₅₀ Val Leu
 Asp Ser Asp₃₅₅ Gly Ser Phe Phe Leu₃₆₀ Tyr Ser Lys Leu Thr₃₆₅ Val Asp Lys
 Ser Arg Trp Gln Gln Gly Asn₃₇₅ Val Phe Ser Cys Ser₃₈₀ Val Met His Glu
 Ala Leu His Asn His Tyr₃₉₀ Thr Gln Lys Ser Leu₃₉₅ Ser Leu Ser Pro

<210> 90
 <211> 442
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 90

Met Gly Asn Ser Cys Tyr Asn Ile Val Ala Thr Leu Leu Leu Val Leu
 1 5 10 15

Asn Phe Glu Arg Thr Arg Ser Leu Gln Asp Pro Cys Ser Asn Cys Pro
 20 25 30
 Ala Gly Thr Phe Cys Asp Asn Asn Arg Asn Gln Ile Cys Ser Pro Cys
 35 40 45
 Pro Pro Asn Ser Phe Ser Ser Ala Gly Gly Gln Arg Thr Cys Asp Ile
 50 55 60
 Cys Arg Gln Cys Lys Gly Val Phe Arg Thr Arg Lys Glu Cys Ser Ser
 65 70 75 80
 Thr Ser Asn Ala Glu Cys Asp Cys Thr Pro Gly Phe His Cys Leu Gly
 85 90 95
 Ala Gly Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu
 100 105 110
 Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln
 115 120 125
 Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys
 130 135 140
 Ser Val Leu Val Asn Gly Thr Lys Glu Arg Asp Val Val Cys Gly Pro
 145 150 155 160
 Ser Pro Ala Asp Leu Ser Pro Gly Ala Ser Ser Val Thr Pro Pro Ala
 165 170 175
 Pro Ala Arg Glu Pro Gly His Ser Pro Gln Asp Ile Glu Gly Arg Met
 180 185 190
 Asp Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 195 200 205
 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 210 215 220
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 225 230 235 240
 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
 245 250 255
 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
 260 265 270
 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
 275 280 285

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
 290 295 300 66
 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
 305 310 315
 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr
 325 330 335
 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
 340 345 350
 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
 355 360 365
 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
 370 375 380
 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
 385 390 395 400
 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
 405 410 415
 Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly Ser Gly Leu Asn Asp Ile
 420 425 430
 Phe Glu Ala Gln Lys Ile Glu Trp His Glu
 435 440

<210> 91
 <211> 347
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 91

Met Val Leu Ala Ser Ser Thr Thr Ser Ile His Thr Met Leu Leu Leu
 1 5 10 15
 Leu Leu Met Leu Ala Gln Pro Ala Met Ala Met Lys Asp Asn Thr Val
 20 25 30
 Pro Leu Lys Leu Ile Ala Leu Leu Ala Asn Gly Glu Phe His Ser Gly
 35 40 45
 Glu Gln Leu Gly Glu Thr Leu Gly Met Ser Arg Ala Ala Ile Asn Lys
 50 55 60
 His Ile Gln Thr Leu Arg Asp Trp Gly Val Asp Val Phe Thr Val Pro
 65 70 75 80

Gly Lys Gly Tyr Ser₈₅ Leu Pro Glu Pro Ile₉₀ Gln Leu Leu Asn Ala₉₅ Lys
 Gln Ile Leu Gly₁₀₀ Gln Leu Asp Gly Gly₁₀₅ Ser Val Ala Val Leu₁₁₀ Pro Val
 Ile Asp Ser₁₁₅ Thr Asn Gln Tyr Leu₁₂₀ Leu Asp Arg Ile Gly₁₂₅ Glu Leu Lys
 Ser Gly₁₃₀ Asp Ala Cys Ile Ala₁₃₅ Glu Tyr Gln Gln Ala₁₄₀ Gly Arg Gly Arg
 Arg Gly₁₄₅ Arg Lys Trp Phe₁₅₀ Ser Pro Phe Gly Ala₁₅₅ Asn Leu Tyr Leu Ser₁₆₀
 Met Phe Trp Arg Leu₁₆₅ Glu Gln Gly Pro Ala₁₇₀ Ala Ala Ile Gly Leu₁₇₅ Ser
 Leu Val Ile Gly₁₈₀ Ile Val Met Ala Glu₁₈₅ Val Leu Arg Lys Leu₁₉₀ Gly Ala
 Asp Lys Val₁₉₅ Arg Val Lys Trp Pro₂₀₀ Asn Asp Leu Tyr Leu₂₀₅ Gln Asp Arg
 Lys Leu₂₁₀ Ala Gly Ile Leu Val₂₁₅ Glu Leu Thr Gly Lys₂₂₀ Thr Gly Asp Ala
 Ala₂₂₅ Gln Ile Val Ile Gly₂₃₀ Ala Gly Ile Asn Met₂₃₅ Ala Met Arg Arg Val₂₄₀
 Glu Glu Ser Val Val₂₄₅ Asn Gln Gly Trp Ile₂₅₀ Thr Leu Gln Glu Ala₂₅₅ Gly
 Ile Asn Leu Asp₂₆₀ Arg Asn Thr Leu Ala₂₆₅ Ala Met Leu Ile Arg₂₇₀ Glu Leu
 Arg Ala Ala₂₇₅ Leu Glu Leu Phe Glu₂₈₀ Gln Glu Gly Leu Ala₂₈₅ Pro Tyr Leu
 Ser Arg₂₉₀ Trp Glu Lys Leu Asp₂₉₅ Asn Phe Ile Asn Arg₃₀₀ Pro Val Lys Leu
 Ile₃₀₅ Ile Gly Asp Lys Glu₃₁₀ Ile Phe Gly Ile Ser₃₁₅ Arg Gly Ile Asp Lys₃₂₀
 Gln Gly Ala Leu Leu₃₂₅ Leu Glu Gln Asp Gly₃₃₀ Ile Ile Lys Pro Trp₃₃₅ Met
 Gly Gly Glu Ile₃₄₀ Ser Leu Arg Ser Ala₃₄₅ Glu Lys

<210> 92
 <211> 442
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 92

Met Gly Asn Ser Cys Tyr Asn Ile Val Ala Thr Leu Leu Leu Val Leu
 1 5 10 15

Asn Phe Glu Arg Thr Arg Ser Leu Gln Asp Leu Cys Ser Asn Cys Pro
 20 25 30

Ala Gly Thr Phe Cys Asp Asn Asn Arg Ser Gln Ile Cys Ser Pro Cys
 35 40 45

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

Cys Arg Gln Cys Lys Gly Val Phe Lys Thr Arg Lys Glu Cys Ser Ser
 65 70 75 80

Thr Ser Asn Ala Glu Cys Asp Cys Ile Ser Gly Tyr His Cys Leu Gly
 85 90 95

Ala Glu Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu
 100 105 110

Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln
 115 120 125

Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys
 130 135 140

Ser Val Leu Val Asn Gly Thr Lys Glu Arg Asp Val Val Cys Gly Pro
 145 150 155 160

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

Pro Ala Arg Glu Pro Gly His Ser Pro Gln Asp Ile Glu Gly Arg Met
 180 185 190

Asp Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 195 200 205

Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 210 215 220

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 225 230 235 240

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
245 250 255

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
260 265 270

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
275 280 285

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
290 295 300

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
305 310 315 320

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

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
340 345 350

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
355 360 365

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
370 375 380

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
385 390 395 400

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
405 410 415

Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly Ser Gly Leu Asn Asp Ile
420 425 430

Phe Glu Ala Gln Lys Ile Glu Trp His Glu
435 440

<210> 93

<211> 328

<212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 93

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

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

Phe Pro Glu₃₅ Pro Val Thr Val Ser₄₀ Trp Asn Ser Gly₄₅ Ala Leu Thr Ser
 Gly Val₅₀ His Thr Phe Pro Ala₅₅ Val Leu Gln Ser₆₀ Gly Leu Tyr Ser
 Leu Ser Ser Val Val Thr₇₀ Val Pro Ser Ser₇₅ Leu Gly Thr Gln Thr₈₀
 Tyr Ile Cys Asn Val₈₅ Asn His Lys Pro Ser₉₀ Asn Thr Lys Val Asp₉₅ Lys
 Lys Val Glu Pro₁₀₀ Lys Ser Cys Asp Lys₁₀₅ Thr His Thr Cys Pro₁₁₀ Pro Cys
 Pro Ala Pro₁₁₅ Glu Leu Leu Gly Gly₁₂₀ Pro Ser Val Phe Leu₁₂₅ Phe Pro Pro
 Lys Pro₁₃₀ Lys Asp Thr Leu Met₁₃₅ Ile Ser Arg Thr Pro₁₄₀ Glu Val Thr Cys
 Val₁₄₅ Val Val Asp Val Glu₁₅₀ His Glu Asp Pro Glu₁₅₅ Val Lys Phe Asn Trp₁₆₀
 Tyr Val Asp Gly Val₁₆₅ Glu Val His Asn Ala₁₇₀ Lys Thr Lys Pro Arg₁₇₅ Glu
 Glu Gln Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val Ser Val Leu Thr₁₉₀ Val Leu
 His Gln Asp₁₉₅ Trp Leu Asn Gly Lys₂₀₀ Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Lys Ala₂₁₀ Phe Pro Ala Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Pro Arg Glu Pro Gln₂₃₀ Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Asp Glu₂₄₀
 Leu Thr Lys Asn Gln₂₄₅ Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe₂₅₅ Tyr
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro₂₇₀ Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr₂₉₀ Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn

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

Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 94
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 94

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ala His Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Arg Phe Gly Leu Lys Asn Phe Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro Gly Lys
 450

<210> 95
 <211> 452
 <212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 95

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ile Asp Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Arg Phe Gly Met Lys Asn Lys Met Asn Trp Val Phe Asp Tyr Trp
100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
210 215 220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
225 230 235 240

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

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
260 265 270

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
275 280 285

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
290 295 300

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
305 310 315 320

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
325 330 335

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
340 345 350

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
435 440 445

Ser Pro Gly Lys
450

<210> 96
<211> 452
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 96

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

Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr

Protein Sequence															
20				25				75				30			
Thr	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ser	Ser	Ile	Ser	Ser	Arg	Ser	Thr	Tyr	Ala	Thr	Tyr	Ala	Asp	Ser	Val
	50					55					60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
65					70					75					80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Tyr	Gly	Leu	Lys	Asn	Ser	Leu	Asn	Trp	Val	Phe	Asp	Tyr	Trp
			100					105					110		
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Thr	Lys	Gly	Pro
		115					120					125			
Ser	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr
	130					135					140				
Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr
145					150					155					160
Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro
				165					170					175	
Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr
			180					185					190		
Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn
		195					200					205			
His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser
	210					215					220				
Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu
225					230					235					240
Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu
				245					250					255	
Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Glu
			260					265					270		
His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu
		275					280					285			
Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr
	290					295					300				

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
305 310 315 320

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
325 330 335

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
340 345 350

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
435 440 445

Ser Pro Gly Lys
450

<210> 97
<211> 452
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 97

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr

65					70					77 75				80
Leu	Gln	Met	Asn	Ser 85	Leu	Arg	Ala	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95
Ala	Arg	Tyr	Gly 100	Thr	Lys	Asn	Ser	Arg 105	Asn	Trp	Val	Phe	Asp 110	Tyr
Gly	Gln	Gly 115	Thr	Leu	Val	Thr	Val 120	Ser	Ser	Ala	Ser	Thr 125	Lys	Gly
Ser	Val 130	Phe	Pro	Leu	Ala	Pro 135	Ser	Ser	Lys	Ser	Thr 140	Ser	Gly	Gly
Ala 145	Ala	Leu	Gly	Cys	Leu 150	Val	Lys	Asp	Tyr	Phe 155	Pro	Glu	Pro	Val
Val	Ser	Trp	Asn	Ser 165	Gly	Ala	Leu	Thr	Ser 170	Gly	Val	His	Thr	Phe 175
Ala	Val	Leu	Gln 180	Ser	Ser	Gly	Leu	Tyr 185	Ser	Leu	Ser	Ser	Val 190	Val
Val	Pro	Ser 195	Ser	Ser	Leu	Gly	Thr 200	Gln	Thr	Tyr	Ile	Cys 205	Asn	Val
His	Lys 210	Pro	Ser	Asn	Thr	Lys 215	Val	Asp	Lys	Lys	Val 220	Glu	Pro	Lys
Cys 225	Asp	Lys	Thr	His	Thr 230	Cys	Pro	Pro	Cys	Pro 235	Ala	Pro	Glu	Leu
Gly	Gly	Pro	Ser	Val 245	Phe	Leu	Phe	Pro	Pro 250	Lys	Pro	Lys	Asp	Thr 255
Met	Ile	Ser	Arg 260	Thr	Pro	Glu	Val	Thr 265	Cys	Val	Val	Val	Asp 270	Val
His	Glu	Asp 275	Pro	Glu	Val	Lys	Phe 280	Asn	Trp	Tyr	Val	Asp 285	Gly	Val
Val	His 290	Asn	Ala	Lys	Thr	Lys 295	Pro	Arg	Glu	Glu	Gln 300	Tyr	Asn	Ser
Tyr 305	Arg	Val	Val	Ser	Val 310	Leu	Thr	Val	Leu	His 315	Gln	Asp	Trp	Leu
Gly	Lys	Glu	Tyr	Lys 325	Cys	Lys	Val	Ser	Asn 330	Lys	Ala	Phe	Pro	Ala 335
Ile	Glu	Lys	Thr 340	Ile	Ser	Lys	Ala	Lys 345	Gly	Gln	Pro	Arg	Glu 350	Pro

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
435 440 445

Ser Pro Gly Lys
450

<210> 98
<211> 452
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 98

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

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

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

Ser Ser Ile Ser Ser Arg Ser Arg Tyr Ile Ser Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Arg Tyr Gly Lys Lys Asn Tyr His Asn Trp Val Phe Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro

	115					120					79		125				
Ser	Val 130	Phe	Pro	Leu	Ala	Pro 135	Ser	Ser	Lys	Ser	Thr 140	Ser	Gly	Gly	Thr		
Ala 145	Ala	Leu	Gly	Cys	Leu 150	Val	Lys	Asp	Tyr	Phe 155	Pro	Glu	Pro	Val	Thr 160		
Val	Ser	Trp	Asn	Ser 165	Gly	Ala	Leu	Thr	Ser 170	Gly	Val	His	Thr	Phe 175	Pro		
Ala	Val	Leu	Gln 180	Ser	Ser	Gly	Leu	Tyr 185	Ser	Leu	Ser	Ser	Val 190	Val	Thr		
Val	Pro	Ser 195	Ser	Ser	Leu	Gly	Thr 200	Gln	Thr	Tyr	Ile	Cys 205	Asn	Val	Asn		
His	Lys 210	Pro	Ser	Asn	Thr	Lys 215	Val	Asp	Lys	Lys	Val 220	Glu	Pro	Lys	Ser		
Cys 225	Asp	Lys	Thr	His	Thr 230	Cys	Pro	Pro	Cys	Pro 235	Ala	Pro	Glu	Leu	Leu 240		
Gly	Gly	Pro	Ser	Val 245	Phe	Leu	Phe	Pro	Pro 250	Lys	Pro	Lys	Asp	Thr 255	Leu		
Met	Ile	Ser	Arg 260	Thr	Pro	Glu	Val	Thr 265	Cys	Val	Val	Val	Asp 270	Val	Glu		
His	Glu	Asp 275	Pro	Glu	Val	Lys	Phe 280	Asn	Trp	Tyr	Val	Asp 285	Gly	Val	Glu		
Val	His 290	Asn	Ala	Lys	Thr	Lys 295	Pro	Arg	Glu	Glu	Gln 300	Tyr	Asn	Ser	Thr		
Tyr 305	Arg	Val	Val	Ser	Val 310	Leu	Thr	Val	Leu	His 315	Gln	Asp	Trp	Leu	Asn 320		
Gly	Lys	Glu	Tyr	Lys 325	Cys	Lys	Val	Ser	Asn 330	Lys	Ala	Phe	Pro	Ala 335	Pro		
Ile	Glu	Lys	Thr 340	Ile	Ser	Lys	Ala	Lys 345	Gly	Gln	Pro	Arg	Glu 350	Pro	Gln		
Val	Tyr	Thr 355	Leu	Pro	Pro	Ser	Arg 360	Asp	Glu	Leu	Thr	Lys 365	Asn	Gln	Val		
Ser	Leu 370	Thr	Cys	Leu	Val	Lys 375	Gly	Phe	Tyr	Pro	Ser 380	Asp	Ile	Ala	Val		
Glu 385	Trp	Glu	Ser	Asn	Gly 390	Gln	Pro	Glu	Asn	Asn 395	Tyr	Lys	Thr	Thr	Pro 400		

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445

Ser Pro Gly Lys
 450

<210> 99
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 99

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys Asp Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Arg Phe Gly Ile Lys Asn His Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro

81

165	170	175
Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr		
	185	190
Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn		
	200	205
His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser		
	215	220
Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu		
	230	235
Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu		
	245	250
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu		
	260	265
His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu		
	275	280
Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr		
	295	300
Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn		
	310	315
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro		
	325	330
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln		
	340	345
Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val		
	355	360
Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val		
	375	380
Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro		
	390	395
Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr		
	405	410
Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val		
	420	425
Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu		
	435	440
		445

Ser Pro Gly Lys
450

<210> 100
<211> 452
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 100

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

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

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

Ser Ser Ile Ser Ser Arg Ser Thr Tyr Ala Ser Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Arg Tyr Gly Lys Lys Asn Met Met Asn Trp Val Phe Asp Tyr Trp
100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser

210

215

220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240

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

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445

Ser Pro Gly Lys
 450

<210> 101
 <211> 452
 <212> PRT
 <213> Artificial Sequence
 <220>

<223> An artificially synthesized sequence

<400> 101

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ile Asp Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Arg Phe Gly Leu Lys Asn Ser Leu Asn Trp Val Phe Asp Tyr Trp
100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
210 215 220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
225 230 235 240

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

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu

260 265 85 270
 His Glu Asp₂₇₅ Pro Glu Val Lys Phe₂₈₀ Asn Trp Tyr Val Asp₂₈₅ Gly Val Glu
 Val His₂₉₀ Asn Ala Lys Thr Lys₂₉₅ Pro Arg Glu Glu Gln₃₀₀ Tyr Asn Ser Thr
 Tyr₃₀₅ Arg Val Val Ser Val₃₁₀ Leu Thr Val Leu His₃₁₅ Gln Asp Trp Leu Asn₃₂₀
 Gly Lys Glu Tyr Lys₃₂₅ Cys Lys Val Ser Asn₃₃₀ Lys Ala Phe Pro Ala₃₃₅ Pro
 Ile Glu Lys Thr₃₄₀ Ile Ser Lys Ala Lys₃₄₅ Gly Gln Pro Arg Glu₃₅₀ Pro Gln
 Val Tyr Thr₃₅₅ Leu Pro Pro Ser Arg₃₆₀ Asp Glu Leu Thr Lys₃₆₅ Asn Gln Val
 Ser Leu₃₇₀ Thr Cys Leu Val Lys₃₇₅ Gly Phe Tyr Pro Ser₃₈₀ Asp Ile Ala Val
 Glu₃₈₅ Trp Glu Ser Asn Gly₃₉₀ Gln Pro Glu Asn Asn₃₉₅ Tyr Lys Thr Thr Pro₄₀₀
 Pro Val Leu Asp Ser₄₀₅ Asp Gly Ser Phe Phe₄₁₀ Leu Tyr Ser Lys Leu₄₁₅ Thr
 Val Asp Lys Ser₄₂₀ Arg Trp Gln Gln Gly₄₂₅ Asn Val Phe Ser Cys₄₃₀ Ser Val
 Met His Glu₄₃₅ Ala Leu His Asn His₄₄₀ Tyr Thr Gln Lys Ser₄₄₅ Leu Ser Leu
 Ser Pro Gly Lys
 450

<210> 102
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 102

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
 1 5 10 15
 Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser His
 20 25 30

Thr Met Asn₃₅ Trp Val Arg Gln Ala₄₀ Pro Gly⁸⁶ Lys Gly₄₅ Leu Glu Trp Ile
 Ser Ser₅₀ Ile Ser Ser Arg Ser₅₅ Asn Tyr Lys Ser Tyr₆₀ Ala Asp Ser Val
 Lys₆₅ Gly Arg Phe Thr Ile₇₀ Ser Arg Asp Asn Ala₇₅ Lys Asn Ser Leu Tyr₈₀
 Leu Gln Met Asn₈₅ Ser Leu Arg Ala Glu Asp₉₀ Thr Ala Val Tyr Tyr₉₅ Cys
 Ala Arg Tyr Gly₁₀₀ His Lys Asn Met His₁₀₅ Asn Trp Val Phe Asp₁₁₀ Tyr Trp
 Gly Gln Gly₁₁₅ Thr Leu Val Thr Val₁₂₀ Ser Ser Ala Ser Thr₁₂₅ Lys Gly Pro
 Ser Val₁₃₀ Phe Pro Leu Ala Pro₁₃₅ Ser Ser Lys Ser Thr₁₄₀ Ser Gly Gly Thr
 Ala₁₄₅ Ala Leu Gly Cys Leu₁₅₀ Val Lys Asp Tyr Phe₁₅₅ Pro Glu Pro Val Thr₁₆₀
 Val Ser Trp Asn Ser₁₆₅ Gly Ala Leu Thr Ser₁₇₀ Gly Val His Thr Phe₁₇₅ Pro
 Ala Val Leu Gln₁₈₀ Ser Ser Gly Leu Tyr₁₈₅ Ser Leu Ser Ser Val₁₉₀ Val Thr
 Val Pro Ser₁₉₅ Ser Ser Leu Gly Thr₂₀₀ Gln Thr Tyr Ile Cys₂₀₅ Asn Val Asn
 His Lys₂₁₀ Pro Ser Asn Thr Lys₂₁₅ Val Asp Lys Lys Val₂₂₀ Glu Pro Lys Ser
 Cys₂₂₅ Asp Lys Thr His Thr₂₃₀ Cys Pro Pro Cys Pro₂₃₅ Ala Pro Glu Leu Leu₂₄₀
 Gly Gly Pro Ser Val₂₄₅ Phe Leu Phe Pro Pro₂₅₀ Lys Pro Lys Asp Thr₂₅₅ Leu
 Met Ile Ser Arg₂₆₀ Thr Pro Glu Val Thr₂₆₅ Cys Val Val Val Asp₂₇₀ Val Glu
 His Glu Asp₂₇₅ Pro Glu Val Lys Phe₂₈₀ Asn Trp Tyr Val Asp₂₈₅ Gly Val Glu
 Val His₂₉₀ Asn Ala Lys Thr Lys₂₉₅ Pro Arg Glu Glu Gln₃₀₀ Tyr Asn Ser Thr
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn

[illegible]

1 Glu Val Gln Leu 5 Val Glu Ser Gly Gly Asp 10 Leu Val Lys Pro Gly 15 Gly
 Gly Leu Arg 20 Leu Ser Cys Ala Ala Ser 25 Gly Phe Thr Phe Ser 30 Thr Phe
 Thr Met 35 Asn Trp Val Arg Gln 40 Ala Pro Gly Lys Gly 45 Leu Glu Trp Val
 Ser Ser 50 Ile Ser Ser Arg Ser 55 Asn Tyr Ile Tyr 60 Tyr Ala Asp Ser Val
 Lys 65 Gly Arg Phe Thr 70 Ile Ser Arg Asp Asn 75 Ala Lys Asn Ser Leu Tyr
 80

Leu Gln Met Asn Ser₈₅ Leu Arg Ala Glu Asp₈₈₉₀ Thr Ala Val Tyr Tyr₉₅ Cys
 Ala Arg Phe Gly₁₀₀ Leu Lys Asn Glu Met₁₀₅ Asn Trp Val Phe Asp₁₁₀ Tyr Trp
 Gly Gln Gly₁₁₅ Thr Leu Val Thr Val₁₂₀ Ser Ser Ala Ser Thr₁₂₅ Lys Gly Pro
 Ser Val₁₃₀ Phe Pro Leu Ala Pro₁₃₅ Ser Ser Lys Ser Thr₁₄₀ Ser Gly Gly Thr
 Ala Ala Leu Gly Cys Leu₁₅₀ Val Lys Asp Tyr Phe₁₅₅ Pro Glu Pro Val Thr₁₆₀
 Val Ser Trp Asn Ser₁₆₅ Gly Ala Leu Thr Ser₁₇₀ Gly Val His Thr Phe₁₇₅ Pro
 Ala Val Leu Gln₁₈₀ Ser Ser Gly Leu Tyr₁₈₅ Ser Leu Ser Ser Val₁₉₀ Val Thr
 Val Pro Ser₁₉₅ Ser Ser Leu Gly Thr₂₀₀ Gln Thr Tyr Ile Cys₂₀₅ Asn Val Asn
 His Lys₂₁₀ Pro Ser Asn Thr Lys₂₁₅ Val Asp Lys Lys Val₂₂₀ Glu Pro Lys Ser
 Cys₂₂₅ Asp Lys Thr His Thr₂₃₀ Cys Pro Pro Cys Pro₂₃₅ Ala Pro Glu Leu Leu₂₄₀
 Gly Gly Pro Ser Val₂₄₅ Phe Leu Phe Pro Pro₂₅₀ Lys Pro Lys Asp Thr₂₅₅ Leu
 Met Ile Ser Arg₂₆₀ Thr Pro Glu Val Thr₂₆₅ Cys Val Val Val Asp₂₇₀ Val Glu
 His Glu Asp₂₇₅ Pro Glu Val Lys Phe₂₈₀ Asn Trp Tyr Val Asp₂₈₅ Gly Val Glu
 Val His₂₉₀ Asn Ala Lys Thr Lys₂₉₅ Pro Arg Glu Glu Gln₃₀₀ Tyr Asn Ser Thr
 Tyr Arg Val Val Ser Val₃₁₀ Leu Thr Val Leu His₃₁₅ Gln Asp Trp Leu Asn₃₂₀
 Gly Lys Glu Tyr Lys₃₂₅ Cys Lys Val Ser Asn₃₃₀ Lys Ala Phe Pro Ala₃₃₅ Pro
 Ile Glu Lys Thr₃₄₀ Ile Ser Lys Ala Lys₃₄₅ Gly Gln Pro Arg Glu₃₅₀ Pro Gln
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val

355

360

365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445

Ser Pro Gly Lys
 450

<210> 104
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 104

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ile Asp Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Arg Tyr Gly Ile Lys Asn Glu Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys⁹⁰ Ser Thr Ser Gly Gly Thr
 130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240

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

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr

405 410⁹¹ 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro Gly Lys
 450
 <210> 105
 <211> 452
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 105
 Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
 1 5 10 15
 Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Arg Ser Asn Tyr Arg Asp Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Gly Lys Asn Ile Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
 115 120 125
 Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140
 Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
 145 150 155 160
 Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr⁹² Ser Leu Ser Ser Val Val Thr
 180 185 190
 Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro Gly Lys

450

<210> 106
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 106

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ile Asp Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Arg Phe Gly Lys Lys Asn Asp Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys⁹⁴ Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro Gly Lys
 450

<210> 107
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence
 <400> 107

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
 1 5 10 15
 Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys Phe Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Phe Gly Val Lys Asn Asn Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
 115 120 125
 Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140
 Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
 145 150 155 160
 Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175
 Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190
 Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270

His Glu Asp₂₇₅ Pro Glu Val Lys Phe₂₈₀ Asn Trp⁹⁶ Tyr Val Asp₂₈₅ Gly Val Glu
 Val His₂₉₀ Asn Ala Lys Thr Lys₂₉₅ Pro Arg Glu Glu Gln₃₀₀ Tyr Asn Ser Thr
 Tyr₃₀₅ Arg Val Val Ser Val₃₁₀ Leu Thr Val Leu His₃₁₅ Gln Asp Trp Leu Asn₃₂₀
 Gly Lys Glu Tyr Lys₃₂₅ Cys Lys Val Ser Asn₃₃₀ Lys Ala Phe Pro Ala₃₃₅ Pro
 Ile Glu Lys Thr₃₄₀ Ile Ser Lys Ala Lys₃₄₅ Gly Gln Pro Arg Glu₃₅₀ Pro Gln
 Val Tyr Thr₃₅₅ Leu Pro Pro Ser Arg₃₆₀ Asp Glu Leu Thr Lys₃₆₅ Asn Gln Val
 Ser Leu₃₇₀ Thr Cys Leu Val Lys₃₇₅ Gly Phe Tyr Pro Ser₃₈₀ Asp Ile Ala Val
 Glu₃₈₅ Trp Glu Ser Asn Gly₃₉₀ Gln Pro Glu Asn Asn₃₉₅ Tyr Lys Thr Thr Pro₄₀₀
 Pro Val Leu Asp Ser₄₀₅ Asp Gly Ser Phe Phe₄₁₀ Leu Tyr Ser Lys Leu₄₁₅ Thr
 Val Asp Lys Ser₄₂₀ Arg Trp Gln Gln Gly₄₂₅ Asn Val Phe Ser Cys₄₃₀ Ser Val
 Met His Glu₄₃₅ Ala Leu His Asn His₄₄₀ Tyr Thr Gln Lys Ser₄₄₅ Leu Ser Leu
 Ser Pro Gly Lys
 450

<210> 108
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 108

Glu Val Gln Leu Val₅ Glu Ser Gly Gly₁₀ Asp Leu Val Lys Pro Gly₁₅ Gly
 Gly Leu Arg Leu₂₀ Ser Cys Ala Ala Ser₂₅ Gly Phe Thr Phe Ser₃₀ Gly Tyr
 Thr Met Asn₃₅ Trp Val Arg Gln Ala₄₀ Pro Gly Lys Gly₄₅ Leu Glu Trp Val

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ala Asp Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Ala Lys Asn Val Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
 115 120 125
 Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140
 Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
 145 150 155 160
 Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175
 Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190
 Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320

Gly Lys Glu Tyr Lys₃₂₅ Cys Lys Val Ser Asn⁹⁸₃₃₀ Lys Ala Phe Pro Ala₃₃₅ Pro

Ile Glu Lys Thr₃₄₀ Ile Ser Lys Ala Lys₃₄₅ Gly Gln Pro Arg Glu₃₅₀ Pro Gln

Val Tyr Thr₃₅₅ Leu Pro Pro Ser Arg₃₆₀ Asp Glu Leu Thr Lys₃₆₅ Asn Gln Val

Ser Leu₃₇₀ Thr Cys Leu Val Lys₃₇₅ Gly Phe Tyr Pro Ser₃₈₀ Asp Ile Ala Val

Glu₃₈₅ Trp Glu Ser Asn Gly₃₉₀ Gln Pro Glu Asn Asn₃₉₅ Tyr Lys Thr Thr Pro₄₀₀

Pro Val Leu Asp Ser₄₀₅ Asp Gly Ser Phe Phe₄₁₀ Leu Tyr Ser Lys Leu₄₁₅ Thr

Val Asp Lys Ser₄₂₀ Arg Trp Gln Gln Gly₄₂₅ Asn Val Phe Ser Cys₄₃₀ Ser Val

Met His Glu₄₃₅ Ala Leu His Asn His₄₄₀ Tyr Thr Gln Lys Ser₄₄₅ Leu Ser Leu

Ser Pro Gly Lys₄₅₀

<210> 109

<211> 452

<212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 109

Glu Val Gln Leu Val₅ Glu Ser Gly Gly₁₀ Asp Leu Val Lys Pro Gly₁₅ Gly

Gly Leu Arg Leu₂₀ Ser Cys Ala Ala Ser₂₅ Gly Phe Thr Phe Ser₃₀ Thr Phe

Thr Met Asn₃₅ Trp Val Arg Gln Ala₄₀ Pro Gly Lys Gly₄₅ Leu Glu Trp Val

Ser Ser₅₀ Ile Ser Ser Arg Ser₅₅ Asn Tyr Lys Ser Tyr₆₀ Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile₇₀ Ser Arg Asp Asn Ala₇₅ Lys Asn Ser Leu Tyr₈₀

Leu Gln Met Asn Ser₈₅ Leu Arg Ala Glu Asp₉₀ Thr Ala Val Tyr Tyr₉₅ Cys

Ala Arg Tyr Gly Ala Lys Asn Phe Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
 115 120 125
 Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140
 Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
 145 150 155 160
 Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175
 Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190
 Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380 100
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro Gly Lys
 450

<210> 110
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 110

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
 1 5 10 15
 Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Gly Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys His Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Phe Gly Leu Lys Asn Glu Arg Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro
 115 120 125
 Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140

Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr
 145 150 155 160
 Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175
 Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190
 Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 102 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445

Ser Pro Gly Lys
 450

<210> 111
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 111

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys Phe Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Arg Phe Gly Gly Lys Asn Asn Met Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro Gly Lys
 450

<210> 112
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 112

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Ala Asp Tyr Ala Asp Ser Val
 50 55 60

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

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

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

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

Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr
 130 135 140

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

Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro
 165 170 175

Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr
 180 185 190

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205

His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220

Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240

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

Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
260 265 270

His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
275 280 285

Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
290 295 300

Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
305 310 315 320

Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
325 330 335

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
340 345 350

Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
355 360 365

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
370 375 380

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
385 390 395 400

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
405 410 415

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
420 425 430

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
435 440 445

Ser Pro Gly Lys
450

<210>	113
<211>	216
<212>	PRT
<213>	Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 113

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Ala Gln Leu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 114
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 114

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

Thr Val Asn Ile Ser Cys Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr

20 25 107 30
 Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45
 Met Ile Tyr Glu Thr Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60
 Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80
 Gln Ala Glu Asp Glu Ala Asp Tyr Phe Cys Ser Thr Tyr Arg Tyr Asn
 85 90 95
 Asn Leu Leu Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110
 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
 115 120 125
 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 130 135 140
 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 145 150 155 160
 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
 165 170 175
 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 180 185 190
 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205
 Thr Val Ala Pro Thr Glu Cys Ser
 210 215

<210> 115
 <211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 115

Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr
 20 25 30

Asn Tyr Val₃₅ Ser Trp Tyr Gln₄₀ Gln¹⁰⁸ His Pro Gly Lys Ala₄₅ Pro Lys Leu
 Met Ile₅₀ Tyr Glu Val Ser Lys₅₅ Lys Pro Ser Gly Val₆₀ Pro Asp Arg Phe
 Ser Gly₆₅ Ser Lys Ser Gly₇₀ Asn Thr Ala Ser Leu₇₅ Thr Val Ser Gly₈₀ Leu
 Gln Ala Glu Asp Glu₈₅ Ala Asp Tyr Phe Cys₉₀ Ser Thr Tyr Ser Tyr₉₅ Asp
 Glu Ser Val Ala₁₀₀ Phe Gly Gly Gly Thr₁₀₅ Lys Leu Thr Val Leu₁₁₀ Gly Gln
 Pro Lys Ala₁₁₅ Ala Pro Ser Val Thr₁₂₀ Leu Phe Pro Pro Ser₁₂₅ Ser Glu Glu
 Leu Gln₁₃₀ Ala Asn Lys Ala Thr₁₃₅ Leu Val Cys Leu Ile₁₄₀ Ser Asp Phe Tyr
 Pro Gly Ala Val Thr Val₁₅₀ Ala Trp Lys Ala Asp₁₅₅ Ser Ser Pro Val Lys₁₆₀
 Ala Gly Val Glu Thr₁₆₅ Thr Thr Pro Ser Lys₁₇₀ Gln Ser Asn Asn Lys₁₇₅ Tyr
 Ala Ala Ser Ser₁₈₀ Tyr Leu Ser Leu Thr₁₈₅ Pro Glu Gln Trp Lys₁₉₀ Ser His
 Arg Ser Tyr₁₉₅ Ser Cys Gln Val Thr₂₀₀ His Glu Gly Ser Thr₂₀₅ Val Glu Lys
 Thr Val₂₁₀ Ala Pro Thr Glu Cys₂₁₅ Ser

<210> 116
 <211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 116

Gln Ser Ala Leu Thr₅ Gln Pro Pro Ser Ala₁₀ Ser Gly Ser Pro Gly₁₅ Gln
 Thr Val Thr Ile₂₀ Ser Cys Thr Gly Thr₂₅ Ser Thr Asp Val Gly₃₀ Phe Tyr
 Asn Tyr Val₃₅ Ser Trp Tyr Gln₄₀ Gln His Pro Gly Lys Ala₄₅ Pro Lys Leu

Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Lys Asn Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 117
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 117

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

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

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

Met Ile Tyr Glu Thr Ser Lys Lys Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Asp Gln Val Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 118
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 118

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu

Gln Ala Glu Asp Glu Ala Asp Tyr Phe Cys¹¹² Ser Thr Tyr Arg Tyr Arg
85 90 95

Asp Tyr Val Gly Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 120
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 120

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

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

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

Met Ile Tyr Glu Thr Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Ser Ile Leu Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
 210 215

<210> 121
 <211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 121

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

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

Gln Asn Val Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 122
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 122

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

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

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

Met Ile Tyr Glu Gly Ser Lys Lys Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Tyr Tyr Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu

										115						
		115					120					125				
Leu	Gln 130	Ala	Asn	Lys	Ala	Thr 135	Leu	Val	Cys	Leu	Ile 140	Ser	Asp	Phe	Tyr	
Pro 145	Gly	Ala	Val	Thr	Val 150	Ala	Trp	Lys	Ala	Asp 155	Ser	Ser	Pro	Val	Lys 160	
Ala	Gly	Val	Glu	Thr 165	Thr	Thr	Pro	Ser	Lys 170	Gln	Ser	Asn	Asn	Lys 175	Tyr	
Ala	Ala	Ser	Ser 180	Tyr	Leu	Ser	Leu	Thr 185	Pro	Glu	Gln	Trp	Lys 190	Ser	His	
Arg	Ser	Tyr 195	Ser	Cys	Gln	Val	Thr 200	His	Glu	Gly	Ser	Thr 205	Val	Glu	Lys	
Thr	Val 210	Ala	Pro	Thr	Glu	Cys 215	Ser									

Gln 1	Ser	Ala	Leu 5	Thr	Gln	Pro	Pro	Ser	Ala 10	Ser	Gly	Ser	Pro	Gly 15	Gln
Thr	Val	Thr	Ile 20	Ser	Cys	Thr	Gly	Thr 25	Ser	Thr	Asp	Val	Gly 30	Phe	Tyr
Asn	Tyr	Val 35	Ser	Trp	Tyr	Gln	Gln 40	His	Pro	Gly	Lys	Ala 45	Pro	Lys	Leu
Met	Ile 50	Tyr	Glu	Thr	Ser	Lys 55	Lys	Pro	Ser	Gly	Val 60	Pro	Asp	Arg	Phe
Ser 65	Gly	Ser	Lys	Ser	Gly 70	Asn	Thr	Ala	Ser	Leu 75	Thr	Val	Ser	Gly	Leu 80
Gln	Ala	Glu	Asp	Glu 85	Ala	Asp	Tyr	Phe	Cys 90	Ser	Val	Tyr	Arg	Tyr 95	Ser
Leu	Gly	Val	Gly 100	Phe	Gly	Gly	Gly	Thr 105	Lys	Leu	Thr	Val	Leu 110	Gly	Gln
Pro	Lys	Ala 115	Ala	Pro	Ser	Val	Thr 120	Leu	Phe	Pro	Pro	Ser 125	Ser	Glu	Glu

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys¹¹⁶ Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 124
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 124

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Thr His Val Gly Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 125

<211> 216

<212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 125

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

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

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

Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Glu Ser Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 126

$\langle 211 \rangle$ 216

<212> PRT

<213> Artificial Sequence

$\langle 220 \rangle$

<223> An artificially synthesized sequence

<400> 126

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Glu Ser Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr

165 119 170 175
 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 180 185 190
 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205
 Thr Val Ala Pro Thr Glu Cys Ser
 210 215
 <210> 127
 <211> 216
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 127
 Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr
 20 25 30
 Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45
 Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60
 Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80
 Gln Ala Glu Asp Glu Ala Asp Tyr Phe Cys Ser Ser Tyr Ala Tyr Thr
 85 90 95
 Lys Asn Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110
 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
 115 120 125
 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 130 135 140
 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 145 150 155 160
 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
 165 170 175

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190 120

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 128
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 128

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
 210 215

<210> 129
 <211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 129

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

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

Ala Leu Leu Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
210 215

<210> 130
<211> 216
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 130

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80

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

Glu Ser Val Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
195 200 205

Thr Val Ala Pro Thr Glu Cys Ser

210

215

<210> 131
 <211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 131

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

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

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

Met Ile Tyr Glu Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

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

Gln Gln Leu Met Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110

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

Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 130 135 140

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 145 150 155 160

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

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 180 185 190

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205

Thr Val Ala Pro Thr Glu Cys Ser
 210 215

<210> 132
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 132

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

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

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

Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys Ser Tyr Ala Asp Ser Val
 50 55 60

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

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

Ala Arg Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110

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

<210> 133
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 133

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

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

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

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

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu

65		70		125		80
				75		
Gln	Ala	Glu	Asp	Glu	Ala	Asp
		85				
				Tyr	Tyr	Cys
						90
				Ser	Ser	Tyr
						Arg
						95
						Tyr
						Glu
His	Gln	Val	Ser	Phe	Gly	Gly
		100				
						Gly
						Thr
						105
						Lys
						Leu
						Thr
						Val
						110
						Leu
<210>	134					
<211>	450					
<212>	PRT					
<213>	Artificial Sequence					
<220>						
<223>	An artificially synthesized sequence					
<400>	134					
Glu	Val	Gln	Leu	Val	Glu	Ser
1			5			
						Gly
						Gly
						10
						Leu
						Val
						Lys
						Pro
						15
						Gly
						Gly
Ser	Leu	Arg	Leu	Ser	Cys	Ala
			20			
						Ala
						25
						Ser
						Gly
						Phe
						Thr
						Phe
						30
						Ser
						Thr
						Phe
Thr	Met	Asn	Trp	Val	Arg	Gln
		35				
						Ala
						40
						Pro
						Gly
						Lys
						Gly
						45
						Leu
						Glu
						Trp
						Val
Ser	Ser	Ile	Ser	Ser	Arg	Ser
						55
						Asn
						Tyr
						Lys
						Glu
						60
						Tyr
						Ala
						Asp
						Ser
						Val
Lys	Gly	Arg	Phe	Thr	Ile	Ser
65					70	
						Arg
						Asp
						Asn
						75
						Ala
						Lys
						Asn
						Ser
						Leu
						80
						Tyr
Leu	Gln	Met	Asn	Ser	Leu	Arg
				85		
						Ala
						Glu
						90
						Asp
						Thr
						Ala
						Val
						Tyr
						95
						Cys
Ala	Arg	Tyr	Gly	Ala	Lys	Asn
			100			
						Phe
						105
						Leu
						Asn
						Trp
						Val
						Phe
						110
						Asp
						Tyr
						Trp
Gly	Gln	Gly	Thr	Leu	Val	Thr
		115				
						Val
						120
						Ser
						Ser
						Ala
						Ser
						125
						Thr
						Lys
						Gly
						Pro
Ser	Val	Phe	Pro	Leu	Ala	Pro
	130					135
						Ser
						Ser
						Lys
						Ser
						140
						Thr
						Ser
						Gly
						Gly
						Thr
Ala	Ala	Leu	Gly	Cys	Leu	Val
145					150	
						Lys
						Asp
						Tyr
						155
						Phe
						Pro
						Glu
						Pro
						Val
						160
						Thr
Val	Ser	Trp	Asn	Ser	Gly	Ala
						165
						Leu
						Thr
						170
						Ser
						Gly
						Val
						His
						175
						Thr
						Phe
						Pro
Ala	Val	Leu	Gln	Ser	Ser	Gly
						180
						Leu
						Tyr
						185
						Ser
						Leu
						Ser
						Ser
						Val
						190
						Val
						Thr

Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn
 195 200 205
 His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser
 210 215 220
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 225 230 235 240
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 245 250 255
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Glu
 260 265 270
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 275 280 285
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 290 295 300
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 305 310 315 320
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala Pro
 325 330 335
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 340 345 350
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 355 360 365
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 370 375 380
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 385 390 395 400
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 405 410 415
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 420 425 430
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 435 440 445
 Ser Pro
 450

<210> 135

<211> 216
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 135

Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr
 20 25 30
 Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45
 Met Ile Tyr Glu Thr Ser Lys Arg Leu Ser Gly Val Pro Asp Arg Phe
 50 55 60
 Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80
 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu
 85 90 95
 His Gln Val Ser Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 100 105 110
 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
 115 120 125
 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 130 135 140
 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 145 150 155 160
 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
 165 170 175
 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 180 185 190
 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 195 200 205
 Thr Val Ala Pro Thr Glu Cys Ser
 210 215

<210> 136
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 136

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Phe
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Arg Ser Asn Tyr Lys Glu Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Ala Lys Asn Phe Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 137

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> An artificially synthesized sequence

<400> 137

Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Asp Val Gly Phe Tyr
 20 25 30
 Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45
 Met Ile Tyr Glu Thr Ser Lys Arg Leu Ser Gly Val Pro Asp Arg Phe
 50 55 60
 Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80
 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Arg Tyr Glu

[illegible]

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 139
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 139

Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Ile
 35 40 45
 Gly Glu Ile Asn His Gly Gly Tyr Val Thr Tyr Asn Pro Ser Leu Glu
 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
 Arg Asp Tyr Gly Pro Gly Asn Tyr Asp Trp Tyr Phe Asp Leu Trp Gly
 100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 140
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence
<400> 140

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 Gln Ser Val Ser Ser Tyr
20 25 30

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

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

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

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

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

<210> 141
<211> 107
<212> PRT
<213> Homo sapiens

<400> 141

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

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

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

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

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

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

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

<210> 142
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 142

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

Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Ser Thr Tyr
 20 25 30

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

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

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

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

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

Thr Val Ser Ser
 115

<210> 143
 <211> 108
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 143

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

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

His Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Val Leu Val Ile Tyr
35 40 133 45

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

Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met
65 70 75 80

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

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

<210> 144
<211> 324
<212> PRT
<213> Mus musculus

<400> 144

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

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

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

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

Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val
65 70 75 80

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

Ile Val Pro Arg Asp Cys Gly Cys Lys Pro Cys Ile Cys Thr Val Pro
100 105 110

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

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

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

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

Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln Asp Trp Leu Asn
 180 185 190
 Gly Lys Glu Phe Lys Cys Arg Val Asn Ser Ala Ala Phe Pro Ala Pro
 195 200 205
 Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Arg Pro Lys Ala Pro Gln
 210 215 220
 Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala Lys Asp Lys Val
 225 230 235 240
 Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu Asp Ile Thr Val
 245 250 255
 Glu Trp Gln Trp Asn Gly Gln Pro Ala Glu Asn Tyr Lys Asn Thr Gln
 260 265 270
 Pro Ile Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr Ser Lys Leu Asn
 275 280 285
 Val Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe Thr Cys Ser Val
 290 295 300
 Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser Leu Ser His
 305 310 315 320
 Ser Pro Gly Lys

<210> 145
 <211> 324
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 145

Ala Lys Thr Thr Pro Pro Ser Val Tyr Pro Leu Ala Pro Gly Ser Ala
 1 5 10 15
 Ala Gln Thr Asn Ser Met Val Thr Leu Gly Cys Leu Val Lys Gly Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Thr Trp Asn Ser Gly Ser Leu Ser Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Asp Leu Tyr Thr Leu
 50 55 60
 Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val

<212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 146

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

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

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

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

Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val
 65 70 75 80

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

Ile Val Pro Arg Asp Cys Gly Cys Lys Pro Cys Ile Cys Glu Pro Asn
 100 105 110

Glu Val Glu Asp Val Phe Ile Phe Pro Pro Lys Pro Lys Asp Val Leu
 115 120 125

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

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

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

Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln Asp Trp Leu Asn
 180 185 190

Gly Lys Glu Phe Lys Cys Arg Val Asp Ser Ala Ala Phe Pro Ala Pro
 195 200 205

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

Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala Lys Asp Lys Val
 225 230 235 240

Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu Asp Ile Thr Val

245 250¹³⁷ 255
 Glu Trp Gln Trp₂₆₀ Asn Gly Gln Pro Ala₂₆₅ Glu Asn Tyr Lys Asn₂₇₀ Thr Gln
 Pro Ile Met₂₇₅ Asp Thr Asp Gly Ser₂₈₀ Tyr Phe Val Tyr Ser₂₈₅ Lys Leu Asn
 Val Gln Lys Ser Asn Trp Glu₂₉₅ Ala Gly Asn Thr Phe₃₀₀ Thr Cys Ser Val
 Leu His Glu Gly Leu His₃₁₀ Asn His His Thr Glu₃₁₅ Lys Ser Leu Ser His₃₂₀
 Ser Pro Gly Lys

<210> 147
 <211> 107
 <212> PRT
 <213> Mus musculus

<400> 147

Arg Ala Asp Ala₅ Pro Thr Val Ser₁₀ Ile Phe Pro Pro Ser₁₅ Glu
 Gln Leu Thr Ser₂₀ Gly Gly Ala Ser Val₂₅ Val Cys Phe Leu Asn₃₀ Asn Phe
 Tyr Pro Lys₃₅ Asp Ile Asn Val Lys₄₀ Trp Lys Ile Asp Gly₄₅ Ser Glu Arg
 Gln Asn Gly Val Leu Asn Ser₅₅ Trp Thr Asp Gln Asp₆₀ Ser Lys Asp Ser
 Thr Tyr Ser Met Ser₇₀ Thr Leu Thr Leu Thr₇₅ Lys Asp Glu Tyr Glu₈₀
 Arg His Asn Ser Tyr₈₅ Thr Cys Glu Ala Thr₉₀ His Lys Thr Ser Thr₉₅ Ser
 Pro Ile Val Lys₁₀₀ Ser Phe Asn Arg Asn₁₀₅ Glu Cys

<210> 148
 <211> 106
 <212> PRT
 <213> Mus musculus

<400> 148

Gly Gln Pro Lys₅ Ser Ser Pro Ser Val₁₀ Thr Leu Phe Pro Pro Ser₁₅ Ser

Glu Glu Leu Glu Thr Asn Lys Ala Thr Leu Val Cys Thr Ile Thr Asp
 20 25 138 30
 Phe Tyr Pro Gly Val Val Thr Val Asp Trp Lys Val Asp Gly Thr Pro
 35 40 45
 Val Thr Gln Gly Met Glu Thr Thr Gln Pro Ser Lys Gln Ser Asn Asn
 50 55 60
 Lys Tyr Met Ala Ser Ser Tyr Leu Thr Leu Thr Ala Arg Ala Trp Glu
 65 70 75 80
 Arg His Ser Ser Tyr Ser Cys Gln Val Thr His Glu Gly His Thr Val
 85 90 95
 Glu Lys Ser Leu Ser Arg Ala Asp Cys Ser
 100 105

<210> 149
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 149

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Tyr Leu Gly Gly Asp Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Val Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 150
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 150

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Tyr Leu Gly Asp Asp Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 151
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence
<400> 151

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

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

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

Val Val Ile Asp Val Ala Glu Glu Asp Gly Glu Val Lys Phe Asn Trp
145 150 155 160

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

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

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

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

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225 230 235 240

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 152
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 152

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

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

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

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

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

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

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

Thr Val Ser Ser

115

<210> 153
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 153

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Leu Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

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

Gln Pro Arg Glu Pro Gln Val Tyr Thr ¹⁴⁴Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 154
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 154

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

145

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

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 155
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 155

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

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

Phe Pro Glu₃₅ Pro Val Thr Val Ser₄₀ Trp Asn Ser Gly₄₅ Ala Leu Thr Ser
 Gly Val₅₀ His Thr Phe Pro Ala₅₅ Val Leu Gln Ser₆₀ Ser Gly Leu Tyr Ser
 Leu Ser Ser Val Val Thr₇₀ Val Pro Ser Ser₇₅ Leu Gly Thr Gln Thr₈₀
 Tyr Ile Cys Asn Val₈₅ Asn His Lys Pro Ser₉₀ Asn Thr Lys Val Asp₉₅ Lys
 Arg Val Glu Pro₁₀₀ Lys Ser Cys Asp Lys₁₀₅ Thr His Thr Cys Pro₁₁₀ Pro Cys
 Pro Ala Pro₁₁₅ Glu Leu Leu Asn Gly₁₂₀ Pro Ser Val Phe Leu₁₂₅ Phe Pro Pro
 Lys Pro₁₃₀ Lys Asp Thr Leu Met₁₃₅ Ile Ser Arg Thr Pro₁₄₀ Glu Val Thr Cys
 Val₁₄₅ Val Val Asp Val Ser₁₅₀ Asp Glu Asp Pro Gly₁₅₅ Val Lys Phe Asn Trp₁₆₀
 Tyr Val Asp Gly Val₁₆₅ Glu Val His Asn Ala₁₇₀ Lys Thr Lys Pro Arg₁₇₅ Glu
 Glu Gln Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val Ser Val Leu Thr₁₉₀ Val Leu
 His Gln Asp₁₉₅ Trp Leu Asn Gly₂₀₀ Lys Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Lys Ala₂₁₀ Leu Pro Lys Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Glu Glu₂₄₀
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe Tyr₂₅₅
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro₂₇₀ Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn

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

Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 156
 <211> 328
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 156

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Trp Asn Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

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

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

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

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

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

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

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

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

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

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

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

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 157
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 157

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

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

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

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

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

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

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

Asp Ile Gln Met Thr Gln Ser Ser Ser Ser¹⁵⁰ Phe Ser Val Ser Leu Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Glu Asp Ile Tyr Asn Arg
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Asn Ala Pro Arg Leu Leu Ile
 35 40 45
 Ser Gly Ala Thr Ser Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Lys Asp Tyr Thr Leu Ser Ile Thr Ser Leu Gln Thr
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Trp Ser Thr Pro Tyr
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Leu Glu Val Lys
 100 105

<210> 159
 <211> 325
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence
 <400> 159

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 Pro 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
 325

<210> 160
 <211> 319
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 160

Leu Gln Asp Pro Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp Asn
 1 5 10 15

Asn Arg Asn Gln Ile Cys Ser Pro Cys Pro Pro Asn Ser Phe Ser Ser
 20 25 30

Ala Gly Gly Gln Arg Thr Cys Asp Ile Cys Arg Gln Cys Lys Gly Val
 35 40 45
 Phe Arg Thr Arg Lys Glu Cys Ser Ser Thr Ser Asn Ala Glu Cys Asp
 50 55 60
 Ile Glu Gly Arg Met Asp Pro Lys Ser Cys Asp Lys Thr His Thr Cys
 65 70 75 80
 Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu
 85 90 95
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
 100 105 110
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
 115 120 125
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
 130 135 140
 Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
 145 150 155 160
 Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
 165 170 175
 Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
 180 185 190
 Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
 195 200 205
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
 210 215 220
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
 225 230 235 240
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
 245 250 255
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
 260 265 270
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
 275 280 285
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Gly Gly Gly Ser
 290 295 300

Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu
 305 310 315

<210> 161
 <211> 451
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 161

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 Glu Phe Ser Asn Tyr
 20 25 30

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

Gly Met Val His Pro Ile Glu Gly Trp Ala Val 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 Arg Pro Val Phe Cys Cys Pro Arg Gly Ala Phe Asp Ile
 100 105 110

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

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 130 135 140

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

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175

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

Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
 195 200 205

Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys
 210 215 220

Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
225 230 235 240

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

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
260 265 270

Glu His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
275 280 285

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
290 295 300

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
305 310 315 320

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala
325 330 335

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
340 345 350

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
355 360 365

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
370 375 380

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
385 390 395 400

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
405 410 415

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
420 425 430

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
435 440 445

Leu Ser Pro
450

<210> 162
<211> 451
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 162

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 Gly Phe Ser Ser Tyr
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Ala Leu Phe Pro Ile Ser Ser Gln Ala Ser 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 Arg Pro Val Asp Tyr Val Pro His Gly Ala Phe Asp Ile
 100 105 110
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
 115 120 125
 Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 130 135 140
 Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
 145 150 155 160
 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175
 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
 180 185 190
 Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
 195 200 205
 Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys
 210 215 220
 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
 225 230 235 240
 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 245 250 255
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 260 265 270

Glu His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
 275 280 285

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
 290 295 300

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 305 310 315 320

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala
 325 330 335

Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 340 345 350

Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
 355 360 365

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 370 375 380

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 385 390 395 400

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 405 410 415

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
 420 425 430

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
 435 440 445

Leu Ser Pro
 450

<210> 163
 <211> 451
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 163

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 Trp Phe Ser Tyr Tyr
 20 25 30

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

35 40 157 45
 Gly Val Ile Val Pro Ile Asn Gly Ala Ala Gln 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 Arg Pro Val Trp Arg Thr Pro Arg Gly Ala Phe Asp Ile
 100 105 110
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
 115 120 125
 Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 130 135 140
 Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
 145 150 155 160
 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175
 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
 180 185 190
 Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
 195 200 205
 Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys
 210 215 220
 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
 225 230 235 240
 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 245 250 255
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 260 265 270
 Glu His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
 275 280 285
 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
 290 295 300
 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 305 310 315 320

Asn Gly Lys Glu Tyr₃₂₅ Lys Cys Lys Val Ser₃₃₀ Asn Lys Ala Phe Pro₃₃₅ Ala

Pro Ile Glu Lys₃₄₀ Thr Ile Ser Lys Ala₃₄₅ Lys Gly Gln Pro Arg₃₅₀ Glu Pro

Gln Val Tyr₃₅₅ Thr Leu Pro Pro Ser₃₆₀ Arg Asp Glu Leu Thr₃₆₅ Lys Asn Gln

Val Ser₃₇₀ Leu Thr Cys Leu Val₃₇₅ Lys Gly Phe Tyr Pro₃₈₀ Ser Asp Ile Ala

Val₃₈₅ Glu Trp Glu Ser Asn₃₉₀ Gly Gln Pro Glu Asn₃₉₅ Asn Tyr Lys Thr Thr₄₀₀

Pro Pro Val Leu Asp₄₀₅ Ser Asp Gly Ser Phe₄₁₀ Phe Leu Tyr Ser Lys₄₁₅ Leu

Thr Val Asp Lys₄₂₀ Ser Arg Trp Gln Gln₄₂₅ Gly Asn Val Phe Ser₄₃₀ Cys Ser

Val Met His₄₃₅ Glu Ala Leu His Asn₄₄₀ His Tyr Thr Gln Lys₄₄₅ Ser Leu Ser

Leu Ser₄₅₀ Pro

<210> 164
<211> 451
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 164

Gln Val Gln Leu Val₅ Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser₁₅
1 10

Ser Val Lys Val₂₀ Ser Cys Lys Ala Ser₂₅ Gly Gly Asp Phe Ser₃₀ Asn Tyr

Val Ile Ser Trp Val Arg Gln Ala₄₀ Pro Gly Gln Gly Leu Glu Trp Met
35 45

Gly Phe Ile Asn Pro Ile Tyr₅₅ Gly Ala Ala Gly Tyr₆₀ Ala Gln Lys Phe

Gln Gly Arg Val Thr Ile₇₀ Thr Ala Asp Glu Ser₇₅ Thr Ser Thr Ala Tyr₈₀
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

				85					90	159			95	
Ala	Arg	Asp	Glu 100	Pro	Val	Ala	Ser	Leu 105	Pro	His	Gly	Ala	Phe 110	Asp Ile
Trp	Gly	Gln 115	Gly	Thr	Leu	Val	Thr 120	Val	Ser	Ser	Ala	Ser 125	Thr	Lys Gly
Pro	Ser 130	Val	Phe	Pro	Leu	Ala 135	Pro	Ser	Ser	Lys	Ser 140	Thr	Ser	Gly Gly
Thr 145	Ala	Ala	Leu	Gly	Cys 150	Leu	Val	Lys	Asp	Tyr 155	Phe	Pro	Glu	Pro Val 160
Thr	Val	Ser	Trp	Asn 165	Ser	Gly	Ala	Leu	Thr 170	Ser	Gly	Val	His	Thr Phe 175
Pro	Ala	Val	Leu 180	Gln	Ser	Ser	Gly	Leu 185	Tyr	Ser	Leu	Ser	Ser 190	Val Val
Thr	Val	Pro 195	Ser	Ser	Ser	Leu	Gly 200	Thr	Gln	Thr	Tyr	Ile 205	Cys	Asn Val
Asn	His 210	Lys	Pro	Ser	Asn	Thr 215	Lys	Val	Asp	Lys	Lys 220	Val	Glu	Pro Lys
Ser 225	Cys	Asp	Lys	Thr	His 230	Thr	Cys	Pro	Pro	Cys 235	Pro	Ala	Pro	Glu Leu 240
Leu	Gly	Gly	Pro	Ser 245	Val	Phe	Leu	Phe	Pro 250	Pro	Lys	Pro	Lys	Asp Thr 255
Leu	Met	Ile	Ser 260	Arg	Thr	Pro	Glu	Val 265	Thr	Cys	Val	Val	Val 270	Asp Val
Glu	His	Glu 275	Asp	Pro	Glu	Val	Lys 280	Phe	Asn	Trp	Tyr	Val 285	Asp	Gly Val
Glu	Val 290	His	Asn	Ala	Lys	Thr 295	Lys	Pro	Arg	Glu	Glu 300	Gln	Tyr	Asn Ser
Thr 305	Tyr	Arg	Val	Val	Ser 310	Val	Leu	Thr	Val	Leu 315	His	Gln	Asp	Trp Leu 320
Asn	Gly	Lys	Glu	Tyr 325	Lys	Cys	Lys	Val	Ser 330	Asn	Lys	Ala	Phe	Pro Ala 335
Pro	Ile	Glu	Lys 340	Thr	Ile	Ser	Lys	Ala 345	Lys	Gly	Gln	Pro	Arg 350	Glu Pro
Gln	Val	Tyr 355	Thr	Leu	Pro	Pro	Ser 360	Arg	Asp	Glu	Leu	Thr 365	Lys	Asn Gln

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
370 375 380

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
385 390 395 400

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
405 410 415

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
420 425 430

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
435 440 445

Leu Ser Pro
450

<210> 165
<211> 451
<212> PRT
<213> Artificial sequence

<220>
<223> An artificially synthesized sequence

<400> 165

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 Trp Phe Ser His Tyr
20 25 30

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

Gly Val Val Trp Pro Ile Arg Ser Phe Ala Thr 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 Asn Pro Val Thr Ser Trp Pro His Gly Ala Phe Asp Ile
100 105 110

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

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly

130 135 161 140
 Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
 145 150 155 160
 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175
 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
 180 185 190
 Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
 195 200 205
 Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys
 210 215 220
 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
 225 230 235 240
 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 245 250 255
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 260 265 270
 Glu His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
 275 280 285
 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
 290 295 300
 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 305 310 315 320
 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala
 325 330 335
 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 340 345 350
 Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
 355 360 365
 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 370 375 380
 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 385 390 395 400
 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 405 410 415

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
 420 425 430

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
 435 440 445

Leu Ser Pro
 450

<210> 166
 <211> 451
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 166

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 Ala Phe Ser Tyr Tyr
 20 25 30

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

Gly Phe Val Asp Pro Ile Arg Gly Gly Ala Phe 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 Arg Pro Val Asn Ala Ala Pro Arg Gly Ala Phe Asp Ile
 100 105 110

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

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 130 135 140

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

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175

Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val

[illegible]

<210> 167
 <211> 451
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 167

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 Ala Phe Ser Tyr Tyr
 20 25 30

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

Gly Phe Val Asp Pro Ile Arg Gly Gly Ala Phe 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 Arg Pro Val Asn Ala Ala Pro Arg Gly Ala Phe Asp Ile
 100 105 110

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

Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 130 135 140

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

Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175

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

Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
 195 200 205

Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys
 210 215 220

Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu

Gln Val Gln Leu Val Gln Ser Gly Ala Glu¹⁶⁶ Val Lys Lys Pro Gly Ser
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Trp Phe Ser Arg Tyr
 20 25 30
 Ile Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Thr Ile Asn Pro Ile Tyr Gly Val Ala Leu 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 Ser⁸⁵ Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 90 95
 Ala Arg Asp Ala Pro Val Asn Asp Met Pro Arg Gly Ala Phe Asp Ile
 100 105 110
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
 115 120 125
 Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly
 130 135 140
 Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
 145 150 155 160
 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
 165 170 175
 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
 180 185 190
 Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
 195 200 205
 Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys
 210 215 220
 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
 225 230 235 240
 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 245 250 255
 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 260 265 270
 Glu His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val

275 280 167 285
 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
 290 295 300
 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 305 310 315 320
 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Phe Pro Ala
 325 330 335
 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 340 345 350
 Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
 355 360 365
 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 370 375 380
 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 385 390 395 400
 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
 405 410 415
 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
 420 425 430
 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
 435 440 445
 Leu Ser Pro
 450

<210> 169
 <211> 219
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 169

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Ser Pro
 20 25 30
 Gly Asp Asn Thr Phe Leu Ser Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45

Pro Gln Leu Leu Ile Tyr Glu Ile Glu Arg Arg Phe Tyr Gly Val Pro
 50 55 60 168
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95
 Ser Thr Phe Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105 110
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 115 120 125
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 130 135 140
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 145 150 155 160
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 165 170 175
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 180 185 190
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 195 200 205
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 170
 <211> 219
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 170

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Ser Pro
 20 25 30
 Gly Asp Asn Thr Phe Leu Ser Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Gln Leu Leu Ile Tyr Glu Ile Glu Arg Arg Phe Tyr Gly Val Pro
 50 55 60

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

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

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

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

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

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 171
<211> 219
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 171

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

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

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

Pro Gln Leu Leu Ile Tyr Glu Ile Gln His Arg Phe Tyr 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

170

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

Met Gly Phe Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

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

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 172
<211> 219
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 172

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

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

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

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

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala

85 90 171 95
 Lys Asp Phe Pro Arg Thr Phe Gly Pro Gly Thr Lys Val Glu Ile Lys
 100 105 110
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 115 120 125
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 130 135 140
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 145 150 155 160
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 165 170 175
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 180 185 190
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 195 200 205
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 173
 <211> 219
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 173

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Arg Pro
 20 25 30
 Phe Gly Asn Thr Phe Leu Ser Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Gln Leu Leu Ile Tyr Glu Ile Ser Thr Arg Phe Tyr Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95

His Gln Phe Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105 172 110
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 115 120 125
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 130 135 140
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 145 150 155 160
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 165 170 175
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 180 185 190
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 195 200 205
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 174
 <211> 219
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 174

Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15
 Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Gly Asp
 20 25 30
 Arg Gly Asn Thr Tyr Leu Ser Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45
 Pro Gln Leu Leu Ile Tyr Glu Ile Gly Ser Ile Phe Tyr Gly Val Pro
 50 55 60
 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80
 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95
 Ala Glu Phe Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

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

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215

<210> 175
<211> 219
<212> PRT
<213> Artificial sequence

<220>
<223> An artificially synthesized sequence

<400> 175

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

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Trp Asn
20 25 30

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

Pro Gln Leu Leu Ile Tyr Glu Ile Arg Lys Arg Phe Tyr Gly Val Pro
50 55 60

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

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

Gln Asp Phe Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 165 170 175

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

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 176
 <211> 219
 <212> PRT
 <213> Artificial sequence

<220>
 <223> An artificially synthesized sequence
 <400> 176

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

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

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

Pro Gln Leu Leu Ile Tyr Glu Ile Arg Lys Arg Phe Tyr Gly Val Pro
 50 55 60

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

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

Phe Ala Phe Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105 110

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe

130 135 175 140
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 145 150 155 160
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 165 170 175
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 180 185 190
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 195 200 205
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 210 215

<210> 177
 <211> 258
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> An artificially synthesized sequence
 <400> 177

Leu Gln Asp Pro Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp Asn
 1 5 10 15
 Asn Arg Asn Gln Ile Cys Asp Ile Glu Gly Arg Met Asp Pro Lys Ser
 20 25 30
 Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
 35 40 45
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 50 55 60
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
 65 70 75 80
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 85 90 95
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 100 105 110
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 115 120 125
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
 130 135 140

Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 145 150 155 176 160
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 165 170 175
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 180 185 190
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 195 200 205
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 210 215 220
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 225 230 235 240
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 245 250 255

Ser Pro

<210> 178
 <211> 299
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> An artificially synthesized sequence

<400> 178

Leu Gln Asp Pro Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp Asn
 1 5 10
 Asn Arg Asn Gln Ile Cys Ser Pro Cys Pro Pro Asn Ser Phe Ser Ser
 20 25 30
 Ala Gly Gly Gln Arg Thr Cys Asp Ile Cys Arg Gln Cys Lys Gly Val
 35 40 45
 Phe Arg Thr Arg Lys Glu Cys Ser Ser Thr Ser Asn Ala Glu Cys Asp
 50 55 60
 Ile Glu Gly Arg Met Asp Pro Lys Ser Cys Asp Lys Thr His Thr Cys
 65 70 75 80
 Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu
 85 90 95
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
 100 105 110

177

Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
115 120 125

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
130 135 140

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

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
165 170 175

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
180 185 190

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

Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
210 215 220

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
225 230 235 240

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
245 250 255

Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
260 265 270

Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
275 280 285

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
290 295

<210> 179
<211> 377
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 179

Ser Pro Cys Pro Pro Asn Ser Phe Ser Ser Ala Gly Gly Gln Arg Thr
1 5 10 15

Cys Asp Ile Cys Arg Gln Cys Lys Gly Val Phe Arg Thr Arg Lys Glu
20 25 30

Cys Ser Ser Thr Ser Asn Ala Glu Cys Asp Cys Thr Pro Gly Phe His
35 40 45

Cys Leu Gly Ala Gly Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly
 50 55 60

Gln Glu Leu Thr Lys Lys Gly Cys Lys Asp Cys Cys Phe Gly Thr Phe
 65 70 75 80

Asn Asp Gln Lys Arg Gly Ile Cys Arg Pro Trp Thr Asn Cys Ser Leu
 85 90 95

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

Cys Gly Pro Ser Pro Ala Asp Leu Ser Pro Gly Ala Ser Ser Val Thr
 115 120 125

Pro Pro Ala Pro Ala Arg Glu Pro Gly His Ser Pro Gln Asp Ile Glu
 130 135 140

Gly Arg Met Asp Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
 145 150 155 160

Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
 165 170 175

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
 180 185 190

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
 195 200 205

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 210 215 220

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

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
 245 250 255

Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
 260 265 270

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
 275 280 285

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
 290 295 300

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
 305 310 315 320

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
325 330 335

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
340 345 350

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
355 360 365

Thr Gln Lys Ser Leu Ser Leu Ser Pro
370 375

<210>	180
<211>	308
<212>	PRT
<213>	Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 180

Ser Pro Cys Pro Pro Asn Ser Phe Ser Ser Ala Gly Gly Gln Arg Thr
1 5 10 15

Cys Asp Ile Cys Arg Gln Cys Lys Gly Val Phe Arg Thr Arg Lys Glu
20 25 30

Cys Ser Ser Thr Ser Asn Ala Glu Cys Asp Cys Thr Pro Gly Phe His
35 40 45

Cys Leu Gly Ala Gly Cys Ser Met Cys Glu Gln Asp Cys Lys Gln Gly
50 55 60

Gln Glu Leu Thr Lys Lys Gly Cys Asp Ile Glu Gly Arg Met Asp Pro
65 70 75 80

Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
85 90 95

Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
100 105 110

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
115 120 125

Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
130 135 140

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
145 150 155 160

Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
165 170 175

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
180 185 190

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
195 200 205

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
210 215 220

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
225 230 235 240

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
245 250 255

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
260 265 270

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
275 280 285

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
290 295 300

Ser Leu Ser Pro
305

<210> 181
<211> 336
<212> PRT
<213> Artificial Sequence

<220>
<223> An artificially synthesized sequence

<400> 181

Asp Cys Thr Pro Gly Phe His Cys Leu Gly Ala Gly Cys Ser Met Cys
1 5 10 15

Glu Gln Asp Cys Lys Gln Gly Gln Glu Leu Thr Lys Lys Gly Cys Lys
20 25 30

Asp Cys Cys Phe Gly Thr Phe Asn Asp Gln Lys Arg Gly Ile Cys Arg
35 40 45

Pro Trp Thr Asn Cys Ser Leu Asp Gly Lys Ser Val Leu Val Asn Gly
50 55 60

Thr Lys Glu Arg Asp Val Val Cys Gly Pro Ser Pro Ala Asp Leu Ser
65 70 75 80

Pro Gly Ala Ser Ser Val Thr Pro Pro Ala Pro Ala Arg Glu Pro Gly

				85					90	181				95			
His	Ser	Pro	Gln	Asp	Ile	Glu	Gly	Arg	Met	Asp	Pro	Lys	Ser	Cys	Asp		
			100					105					110				
Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly		
		115					120					125					
Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile		
	130					135					140						
Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu		
145					150					155					160		
Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His		
				165					170						175		
Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg		
			180					185					190				
Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys		
		195					200					205					
Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu		
	210					215					220						
Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr		
225					230					235					240		
Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu		
				245					250					255			
Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp		
			260					265					270				
Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val		
		275					280					285					
Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp		
	290					295					300						
Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His		
305					310					315					320		
Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro		
				325					330					335			

<210> 182
 <211> 328
 <212> PRT
 <213> Artificial Sequence
 <220>

<223> An artificially synthesized sequence

<400> 182

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

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

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

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

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

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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

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

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

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

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

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

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

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

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn

260 265 183 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 183
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 183

Leu Gln Asp Pro Cys Ser Asn Cys Pro Ala Gly Thr Phe Cys Asp Asn
 1 5 10 15
 Asn Arg Asn Gln Ile Cys Ser Pro Cys Pro Pro Asn Ser Phe Ser Ser
 20 25 30
 Ala Gly Gly Gln Arg Thr Cys Asp Ile Cys Arg Gln Cys Lys Gly Val
 35 40 45
 Phe Arg Thr Arg Lys Glu Cys Ser Ser Thr Ser Asn Ala Glu Cys Asp
 50 55 60
 Cys Thr Pro Gly Phe His Cys Leu Gly Ala Gly Cys Ser Met Cys Glu
 65 70 75 80
 Gln Asp Cys Lys Gln Gly Gln Glu Leu Thr Lys Lys Gly Cys Lys Asp
 85 90 95
 Cys Cys Phe Gly Thr Phe Asn Asp Gln Lys Arg Gly Ile Cys Arg Pro
 100 105 110
 Trp Thr Asn Cys Ser Leu Asp Gly Lys Ser Val Leu Val Asn Gly Thr
 115 120 125
 Lys Glu Arg Asp Val Val Cys Gly Pro Ser Pro Ala Asp Leu Ser Pro
 130 135 140
 Gly Ala Ser Ser Val Thr Pro Pro Ala Pro Ala Arg Glu Pro Gly His
 145 150 155 160
 Ser Pro Gln His His His His His Gly Gly Gly Gly Ser Gly Leu
 165 170 175

184

Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu
180 185

<210> 184
<211> 330
<212> PRT
<213> Mus musculus

<400> 184

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

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

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

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

Ser Ser Ser Val Thr Val Thr Ser Ser Thr Trp Pro Ser Gln Ser Ile
65 70 75 80

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

Ile Glu Pro Arg Gly Pro Thr Ile Lys Pro Cys Pro Pro Cys Lys Cys
100 105 110

Pro Ala Pro Asn Leu Leu Gly Gly Pro Asp Val Phe Ile Phe Pro Pro
115 120 125

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

Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp
145 150 155 160

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

Glu Asp Tyr Asn Ser Thr Leu Arg Val Val Ser Ala Leu Pro Ile Gln
180 185 190

His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
195 200 205

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

Ser Val Arg Ala Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu Glu

Protein Sequence															
225				230				235				240			
Met	Thr	Lys	Lys	Gln 245	Val	Thr	Leu	Thr	Cys 250	Met	Val	Thr	Asp	Phe 255	Met
Pro	Glu	Asp	Ile 260	Tyr	Val	Glu	Trp	Thr 265	Asn	Asn	Gly	Lys	Thr 270	Glu	Leu
Asn	Tyr	Lys 275	Asn	Thr	Glu	Pro	Val 280	Leu	Asp	Ser	Asp	Gly 285	Ser	Tyr	Phe
Met	Tyr 290	Ser	Lys	Leu	Arg	Val 295	Glu	Lys	Lys	Asn	Trp 300	Val	Glu	Arg	Asn
Ser 305	Tyr	Ser	Cys	Ser	Val 310	Val	His	Glu	Gly	Leu 315	His	Asn	His	His	Thr 320
Thr	Lys	Ser	Phe	Ser 325	Arg	Thr	Pro	Gly	Lys 330						

<210>	186
<211>	107
<212>	PRT
<213>	Homo sapiens
<400>	186

Arg Thr Val Ala Ala Pro Ser Val Phe Ile¹⁸⁶ Phe Pro Pro Ser Asp Glu
 1 5 10 15
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 20 25 30
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 35 40 45
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 50 55 60
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 65 70 75 80
 Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 85 90 95
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 100 105

<210> 187
 <211> 116
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IC17Hdk

<400> 187

Gln Val Gln Leu Gln Gln Ser Gly Pro Gln Leu Val Arg Pro Gly Ala
 1 5 10 15
 Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30
 Trp Met His Trp Val Asn Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
 35 40 45
 Gly Met Ile Asp Pro Ser Tyr Ser Glu Thr Arg Leu Asn Gln Lys Phe
 50 55 60
 Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
 65 70 75 80
 Met Gln Leu Ser Ser Pro Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
 85 90 95
 Ala Leu Tyr Gly Asn Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
 100 105 110
 Thr Val Ser Ser
 115

<210> 188
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> IC17VL

<400> 188

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

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

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

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

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

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

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

<210> 189
 <211> 106
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> lam1

<400> 189

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

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

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

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

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

Ser His Arg Ser Tyr Ser Cys Gln Val Thr¹⁸⁸ His Glu Gly Ser Thr Val
85 90 95

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

<210> 190
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> MRAH

<400> 190

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

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

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

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

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

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

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

Ser Leu Val Thr Val Ser Ser
115

<210> 191
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> MRAL

<400> 191

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

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

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

35 40 189 45
 Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Gly Asn Thr Leu Pro Tyr
 85 90 95
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 192
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> H0002

<400> 192

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
 1 5 10 15
 Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Arg Ser Tyr His Ala Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Lys Leu Tyr Ser Leu Asn Trp Val Phe Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 193
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> L1058

190

<400> 193

Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln
1 5 10 15
Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Asp Val Gly Asp Tyr
20 25 30
Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
35 40 45
Met Ile Tyr Glu Val Val Lys Lys Pro Ser Gly Val Pro Asp Arg Phe
50 55 60
Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
65 70 75 80
Gln Ala Glu Asp Glu Ala Asp Tyr Phe Cys Ser Leu Arg Ser Ala Gly
85 90 95
Pro Tyr Pro Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 194

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> H0041

<400> 194

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
1 5 10 15
Gly Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ser Ile Ser Ser Gln Ser Tyr His Ile Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Tyr Gly Lys Leu Tyr Ser Leu Asn Trp Val Phe Asp Tyr Trp
100 105 110
Gly Gln Gly Thr Leu Val Thr Val Ser Ser

115

120

191

<210> 195
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> L1088

<400> 195

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

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

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

Met Ile Tyr Tyr Val Ser Lys Lys Pro Asp Gly Val Pro Asp Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

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

Pro Tyr Pro Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 196
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> H0052

<400> 196

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

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

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

Ser Ser Ile Ser Ser Arg Ser Tyr His Ile Tyr Tyr Ala Asp Ser Val
 50 55 60

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

Leu Gln Met Asn Ser₈₅ Leu Arg Ala Glu Asp₉₀ Thr Ala Val Tyr Tyr₉₅ Cys

Ala Arg Tyr Gly₁₀₀ Lys Leu Tyr Ser Leu₁₀₅ Asn Trp Val Phe Asp₁₁₀ Tyr Trp

Gly Gln Gly₁₁₅ Thr Leu Val Thr Val₁₂₀ Ser Ser

<210> 197
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> L1083

<400> 197

Gln Ser Ala Leu Thr₅ Gln Pro Pro Ser Ala₁₀ Ser Gly Ser Pro Gly₁₅ Gln

Thr Val Thr Ile₂₀ Ser Cys Thr Gly Thr₂₅ Ser Thr Asp Val Gly₃₀ Asp Tyr

Ala Tyr Val₃₅ Ser Trp Tyr Gln Gln₄₀ His Pro Gly Lys Ala₄₅ Pro Lys Leu

Met Ile₅₀ Tyr Tyr Val Asp Lys₅₅ Lys Pro Ser Gly Val₆₀ Pro Asp Arg Phe

Ser Gly Ser Lys Ser Gly₇₀ Asn Thr Ala Ser Leu₇₅ Thr Val Ser Gly Leu₈₀

Gln Ala Glu Asp Glu₈₅ Ala Asp Tyr Phe Cys₉₀ Ser Leu Arg Ser Pro Gly₉₅

Pro Tyr Pro Leu₁₀₀ Phe Gly Gly Gly Thr₁₀₅ Lys Leu Thr Val Leu₁₁₀

<210> 198
 <211> 325
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> G4T1

<400> 198

Ala Ser Thr Lys Gly₅ Pro Ser Val Phe Pro₁₀ Leu Ala Pro Cys Ser Arg

Ser Thr Ser Glu₂₀ Ser Thr Ala Ala Leu₂₅ Gly Cys Leu Val Lys₃₀ Asp Tyr

Phe Pro Glu₃₅ Pro Val Thr Val Ser₄₀ Trp Asn Ser Gly₄₅ Ala Leu Thr Ser
 Gly₅₀ Val His Thr Phe Pro Ala₅₅ Val Leu Gln Ser₆₀ Ser Gly Leu Tyr Ser
 Leu₆₅ Ser Ser Val Val Thr₇₀ Val Pro Ser Ser₇₅ Leu Gly Thr Gln Thr₈₀
 Tyr Thr Cys Asn₈₅ Val Asp His Lys Pro Ser₉₀ Asn Thr Lys Val Asp₉₅ Lys
 Arg Val Glu Ser₁₀₀ Lys Tyr Gly Pro Pro₁₀₅ Cys Pro Pro Cys₁₁₀ Pro Ala Pro
 Glu Phe Arg₁₁₅ Arg Gly Pro Ser Val₁₂₀ Phe Leu Phe Pro Pro₁₂₅ Lys Pro Lys
 Asp Thr₁₃₀ Leu Met Ile Ser Arg₁₃₅ Thr Pro Glu Val Thr₁₄₀ Cys Val Val Val
 Asp₁₄₅ Val Ser Gln Glu Asp₁₅₀ Pro Glu Val Gln Phe₁₅₅ Asn Trp Tyr Val Asp₁₆₀
 Gly Val Glu Val His₁₆₅ Asn Ala Lys Thr Lys₁₇₀ Pro Arg Glu Glu Gln₁₇₅ Tyr
 Asn Ser Thr Tyr₁₈₀ Arg Val Val Ser Val₁₈₅ Leu Thr Val Leu His₁₉₀ Gln Asp
 Trp Leu Asn₁₉₅ Gly Lys Glu Tyr Lys₂₀₀ Cys Lys Val Ser Asn₂₀₅ Lys Gly Leu
 Pro Ser₂₁₀ Ser Ile Glu Lys Thr₂₁₅ Ile Ser Lys Ala Lys₂₂₀ Gly Gln Pro Arg
 Glu₂₂₅ Pro Gln Val Tyr Thr₂₃₀ Leu Pro Pro Ser Gln₂₃₅ Glu Glu Met Thr Lys₂₄₀
 Asn Gln Val Ser₂₄₅ Leu Thr Cys Leu Val Lys₂₅₀ Gly Phe Tyr Pro Ser₂₅₅ Asp
 Ile Ala Val Glu₂₆₀ Trp Glu Ser Asn Gly₂₆₅ Gln Pro Glu Asn Asn₂₇₀ Tyr Lys
 Thr Thr Pro₂₇₅ Pro Val Leu Asp Ser₂₈₀ Asp Gly Ser Phe Phe₂₈₅ Leu Tyr Ser
 Arg Leu₂₉₀ Thr Val Asp Lys Ser₂₉₅ Arg Trp Gln Glu Gly₃₀₀ Asn Val Phe Ser

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
 305 310 315 194 320

Leu Ser Leu Ser Pro
 325

<210> 199
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> k0

<400> 199

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

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

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

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

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

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

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

<210> 200
 <211> 338
 <212> PRT
 <213> Homo sapiens

<400> 200

Leu Ala Pro Arg Arg Cys Pro Ala Gln Glu Val Ala Arg Gly Val Leu
 1 5 10 15

Thr Ser Leu Pro Gly Asp Ser Val Thr Leu Thr Cys Pro Gly Val Glu
 20 25 30

Pro Glu Asp Asn Ala Thr Val His Trp Val Leu Arg Lys Pro Ala Ala
 35 40 45

Gly Ser His Pro Ser Arg Trp Ala Gly Met Gly Arg Arg Leu Leu Leu
 50 55 60

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

Gly Arg Pro Ala Gly Thr Val His Leu Leu Val Asp Val Pro Pro Glu
 85 90 95

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

Cys Glu Trp Gly Pro Arg Ser Thr Pro Ser Leu Thr Thr Lys Ala Val
 115 120 125

Leu Leu Val Arg Lys Phe Gln Asn Ser Pro Ala Glu Asp Phe Gln Glu
 130 135 140

Pro Cys Gln Tyr Ser Gln Glu Ser Gln Lys Phe Ser Cys Gln Leu Ala
 145 150 155 160

Val Pro Glu Gly Asp Ser Ser Phe Tyr Ile Val Ser Met Cys Val Ala
 165 170 175

Ser Ser Val Gly Ser Lys Phe Ser Lys Thr Gln Thr Phe Gln Gly Cys
 180 185 190

Gly Ile Leu Gln Pro Asp Pro Pro Ala Asn Ile Thr Val Thr Ala Val
 195 200 205

Ala Arg Asn Pro Arg Trp Leu Ser Val Thr Trp Gln Asp Pro His Ser
 210 215 220

Trp Asn Ser Ser Phe Tyr Arg Leu Arg Phe Glu Leu Arg Tyr Arg Ala
 225 230 235 240

Glu Arg Ser Lys Thr Phe Thr Thr Trp Met Val Lys Asp Leu Gln His
 245 250 255

His Cys Val Ile His Asp Ala Trp Ser Gly Leu Arg His Val Val Gln
 260 265 270

Leu Arg Ala Gln Glu Glu Phe Gly Gln Gly Glu Trp Ser Glu Trp Ser
 275 280 285

Pro Glu Ala Met Gly Thr Pro Trp Thr Glu Ser Arg Ser Pro Pro Ala
 290 295 300

Glu Asn Glu Val Ser Thr Pro Met Gln Ala Leu Thr Thr Asn Lys Asp
 305 310 315 320

Asp Asp Asn Ile Leu Phe Arg Asp Ser Ala Asn Ala Thr Ser Leu Pro
 325 330 335

Val Gln

<210> 201
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mPD1F2VH

<400> 201

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

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

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

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

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

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

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

Thr Val Thr Val Ser Ser
 115

<210> 202
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mPD1F2VL

<400> 202

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

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

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

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

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

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

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

<210> 203
<211> 324
<212> PRT
<213> Mus musculus

<400> 203

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

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

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

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

Ser Ser Ser Val Thr Val Pro Ser Ser Thr Trp Pro Ser Glu Thr Val
65 70 75 80

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

Ile Val Pro Arg Asp Cys Gly Cys Lys Pro Cys Ile Cys Thr Val Lys
100 105 110

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

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

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

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

Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln Asp Trp Leu Asn
180 185 190

Gly Lys Glu Phe Lys Cys Arg Val Asn Ser Ala Ala Phe Pro Ala Pro
 195 200 198 205
 Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Arg Pro Lys Ala Pro Gln
 210 215
 Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala Lys Asp Lys Val
 225 230 235
 Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu Asp Ile Thr Val
 245 250 255
 Glu Trp Gln Trp Asn Gly Gln Pro Ala Glu Asn Tyr Lys Asn Thr Gln
 260 265 270
 Pro Ile Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr Ser Lys Leu Asn
 275 280 285
 Val Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe Thr Cys Ser Val
 290 295 300
 Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser Leu Ser His
 305 310 315 320
 Ser Pro Gly Lys

<210> 204
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> H5029

<400> 204

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Thr Tyr
 20 25 30
 Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Ser Ser Arg His Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

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

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

<210> 205
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> L3021

<400> 205

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

Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Pro Ser Gly Ala Trp
 20 25 30

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

Met Ile Tyr Gln Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80

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

Trp Asp Pro Asp Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 206
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> H5041

<400> 206

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

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

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

Ser Ser Ile Ser Ser Ser Ser Lys His Ile Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Tyr Gly Arg Pro Trp Glu Leu Leu Trp Val Leu Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 207
 <211> 110
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> L3023

<400> 207

Gln Ser Ala Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln
 1 5 10 15
 Thr Val Thr Ile Ser Cys Thr Gly Thr Ser Thr Pro Ser Gly Ala Tyr
 20 25 30
 Asp Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45
 Met Ile Tyr Gln Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe
 50 55 60
 Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu
 65 70 75 80
 Gln Ala Glu Asp Glu Ala Asp Tyr Phe Cys Ser Thr Thr Asn Ser Ala
 85 90 95
 Trp Asp Pro Asp Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 208
 <211> 330
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mFa31

<400> 208

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

1	5							10							15						
Asp	Thr	Thr	Gly 20	Ser	Ser	Val	Thr	Leu 25	Gly	Cys	Leu	Val	Lys 30	Gly	Tyr						
Phe	Pro	Glu 35	Pro	Val	Thr	Leu	Thr 40	Trp	Asn	Ser	Gly	Ser 45	Leu	Ser	Ser						
Gly	Val 50	His	Thr	Phe	Pro	Ala 55	Val	Leu	Gln	Ser	Asp 60	Leu	Tyr	Thr	Leu						
Ser 65	Ser	Ser	Val	Thr	Val 70	Thr	Ser	Ser	Thr	Trp 75	Pro	Ser	Gln	Ser	Ile 80						
Thr	Cys	Asn	Val	Ala 85	His	Pro	Ala	Ser	Ser 90	Thr	Lys	Val	Asp	Lys 95	Lys						
Ile	Glu	Pro	Arg 100	Gly	Pro	Thr	Ile	Lys 105	Pro	Cys	Pro	Pro	Cys 110	Lys	Cys						
Pro	Ala	Pro 115	Asn	Leu	Arg	Arg	Gly 120	Pro	Lys	Val	Phe	Ile 125	Phe	Pro	Pro						
Lys	Ile 130	Lys	Asp	Val	Leu	Met 135	Ile	Ser	Leu	Ser	Pro 140	Ile	Val	Thr	Cys						
Val 145	Val	Val	Asp	Val	Ser 150	Glu	Asp	Asp	Pro	Asp 155	Val	Gln	Ile	Ser	Trp 160						
Phe	Val	Asn	Asn	Val 165	Glu	Val	His	Thr	Ala 170	Gln	Thr	Gln	Thr	His 175	Arg						
Glu	Asp	Tyr	Asn 180	Ser	Thr	Leu	Arg	Val 185	Val	Ser	Ala	Leu	Pro 190	Ile	Gln						
His	Gln	Asp 195	Trp	Met	Ser	Gly	Lys 200	Glu	Phe	Lys	Cys	Lys 205	Val	Asn	Asn						
Lys	Asp 210	Leu	Pro	Ala	Pro	Ile 215	Glu	Arg	Thr	Ile	Ser 220	Lys	Pro	Lys	Gly						
Ser 225	Val	Arg	Ala	Pro	Gln 230	Val	Tyr	Val	Leu	Pro 235	Pro	Pro	Glu	Glu	Glu 240						
Met	Thr	Lys	Lys	Gln 245	Val	Thr	Leu	Thr	Cys 250	Met	Val	Thr	Asp	Phe 255	Met						
Pro	Glu	Asp	Ile 260	Tyr	Val	Glu	Trp	Thr 265	Asn	Asn	Gly	Lys	Thr 270	Glu	Leu						
Asn	Tyr	Lys 275	Asn	Thr	Glu	Pro	Val 280	Leu	Asp	Ser	Asp	Gly 285	Ser	Tyr	Phe						

Met Tyr Ser Lys Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn
 290 295 300

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

Thr Lys Ser Phe Ser Arg Thr Pro Gly Lys
 325 330

<210> 209
 <211> 402
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mPD1-G1CH2

<400> 209

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

Ser Trp Gln Ser Gly Trp Leu Leu Glu Val Pro Asn Gly Pro Trp Arg
 20 25 30

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

Ala Thr Phe Thr Cys Ser Leu Ser Asn Trp Ser Glu Asp Leu Met Leu
 50 55 60

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

Phe Ser Asn Gly Leu Ser Gln Pro Val Gln Asp Ala Arg Phe Gln Ile
 85 90 95

Ile Gln Leu Pro Asn Arg His Asp Phe His Met Asn Ile Leu Asp Thr
 100 105 110

Arg Arg Asn Asp Ser Gly Ile Tyr Leu Cys Gly Ala Ile Ser Leu His
 115 120 125

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

Glu Arg Ile Leu Glu Thr Ser Thr Arg Tyr Pro Ser Pro Ser Pro Lys
 145 150 155 160

Pro Glu Gly Arg Phe Gln Asp Ile Glu Gly Arg Met Asp Pro Lys Ser
 165 170 175

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

180 203 190
 Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
 195 200 205
 Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
 210 215 220
 His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
 225 230 235 240
 Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
 245 250 255
 Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
 260 265 270
 Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
 275 280 285
 Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
 290 295 300
 Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
 305 310 315 320
 Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
 325 330 335
 Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
 340 345 350
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
 355 360 365
 Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 370 375 380
 Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 385 390 395 400
 Ser Pro

<210> 210
 <211> 463
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> mPDL1-G1dCH2His

<400> 210

Phe Thr Ile Thr Ala Pro Lys Asp Leu Tyr²⁰⁴ Val Val Glu Tyr Gly Ser
 1 5 10 15
 Asn Val Thr Met Glu Cys Arg Phe Pro Val Glu Arg Glu Leu Asp Leu
 20 25 30
 Leu Ala Leu Val Val Tyr Trp Glu Lys Glu Asp Glu Gln Val Ile Gln
 35 40 45
 Phe Val Ala Gly Glu Glu Asp Leu Lys Pro Gln His Ser Asn Phe Arg
 50 55 60
 Gly Arg Ala Ser Leu Pro Lys Asp Gln Leu Leu Lys Gly Asn Ala Ala
 65 70 75 80
 Leu Gln Ile Thr Asp Val Lys Leu Gln Asp Ala Gly Val Tyr Cys Cys
 85 90 95
 Ile Ile Ser Tyr Gly Gly Ala Asp Tyr Lys Arg Ile Thr Leu Lys Val
 100 105 110
 Asn Ala Pro Tyr Arg Lys Ile Asn Gln Arg Ile Ser Val Asp Pro Ala
 115 120 125
 Thr Ser Glu His Glu Leu Ile Cys Gln Ala Glu Gly Tyr Pro Glu Ala
 130 135 140
 Glu Val Ile Trp Thr Asn Ser Asp His Gln Pro Val Ser Gly Lys Arg
 145 150 155 160
 Ser Val Thr Thr Ser Arg Thr Glu Gly Met Leu Leu Asn Val Thr Ser
 165 170 175
 Ser Leu Arg Val Asn Ala Thr Ala Asn Asp Val Phe Tyr Cys Thr Phe
 180 185 190
 Trp Arg Ser Gln Pro Gly Gln Asn His Thr Ala Glu Leu Ile Ile Pro
 195 200 205
 Glu Leu Pro Ala Thr His Pro Pro Gln Asn Arg Thr His Ile Glu Gly
 210 215 220
 Arg Met Asp Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
 225 230 235 240
 Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
 245 250 255
 Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
 260 265 270
 Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn

275 280 205 285
 Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 290 295 300
 Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
 305 310 315 320
 Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
 325 330 335
 Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
 340 345 350
 Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
 355 360 365
 Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
 370 375 380
 Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
 385 390 395 400
 Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
 405 410 415
 Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
 420 425 430
 Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
 435 440 445
 Thr Gln Lys Ser Leu Ser Leu Ser Pro His His His His His His
 450 455 460

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

 <220>
 <223> mk0

 <400> 211
 Arg Ala Asp Ala Ala Pro Thr Val Ser Ile Phe Pro Pro Ser Ser Glu
 1 5 10 15
 Gln Leu Thr Ser Gly Gly Ala Ser Val Val Cys Phe Leu Asn Asn Phe
 20 25 30
 Tyr Pro Lys Asp Ile Asn Val Lys Trp Lys Ile Asp Gly Ser Glu Arg
 35 40 45

Gln Asn Gly Val Leu Asn Ser Trp Thr Asp Gln Asp Ser Lys Asp Ser
50 55 60 206

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

Arg His Asn Ser Tyr Thr Cys Glu Ala Thr His Lys Thr Ser Thr Ser
85 90 95

Pro Ile Val Lys Ser Phe Asn Arg Asn Glu Cys
100 105

<210> 212
<211> 105
<212> PRT
<213> Artificial Sequence

<220>
<223> m10

<400> 212

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

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

Tyr Pro Gly Val Val Thr Val Asp Trp Lys Val Asp Gly Thr Pro Val
35 40 45

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

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

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

Lys Ser Leu Ser Arg Ala Asp Cys Ser
100 105

<210> 213
<211> 468
<212> PRT
<213> Artificial Sequence

<220>
<223> hIL6R

<400> 213

Met Leu Ala Val Gly Cys Ala Leu Leu Ala Ala Leu Leu Ala Ala Pro
1 5 10 15

Gly Ala Ala Leu Ala Pro Arg Arg Cys Pro Ala Gln Glu Val Ala Arg

	20						25					207			30			
Gly	Val	Leu 35	Thr	Ser	Leu	Pro	Gly 40	Asp	Ser	Val	Thr	Leu 45	Thr	Cys	Pro			
Gly	Val 50	Glu	Pro	Glu	Asp	Asn 55	Ala	Thr	Val	His	Trp 60	Val	Leu	Arg	Lys			
Pro 65	Ala	Ala	Gly	Ser	His 70	Pro	Ser	Arg	Trp	Ala 75	Gly	Met	Gly	Arg	Arg 80			
Leu	Leu	Leu	Arg	Ser 85	Val	Gln	Leu	His	Asp 90	Ser	Gly	Asn	Tyr	Ser 95	Cys			
Tyr	Arg	Ala	Gly 100	Arg	Pro	Ala	Gly	Thr 105	Val	His	Leu	Leu	Val 110	Asp	Val			
Pro	Pro	Glu 115	Glu	Pro	Gln	Leu	Ser 120	Cys	Phe	Arg	Lys	Ser 125	Pro	Leu	Ser			
Asn	Val 130	Val	Cys	Glu	Trp	Gly 135	Pro	Arg	Ser	Thr	Pro 140	Ser	Leu	Thr	Thr			
Lys 145	Ala	Val	Leu	Leu	Val 150	Arg	Lys	Phe	Gln	Asn 155	Ser	Pro	Ala	Glu	Asp 160			
Phe	Gln	Glu	Pro	Cys 165	Gln	Tyr	Ser	Gln	Glu 170	Ser	Gln	Lys	Phe	Ser 175	Cys			
Gln	Leu	Ala	Val 180	Pro	Glu	Gly	Asp	Ser 185	Ser	Phe	Tyr	Ile	Val 190	Ser	Met			
Cys	Val	Ala 195	Ser	Ser	Val	Gly	Ser 200	Lys	Phe	Ser	Lys	Thr 205	Gln	Thr	Phe			
Gln	Gly 210	Cys	Gly	Ile	Leu	Gln 215	Pro	Asp	Pro	Pro	Ala 220	Asn	Ile	Thr	Val			
Thr 225	Ala	Val	Ala	Arg	Asn 230	Pro	Arg	Trp	Leu	Ser 235	Val	Thr	Trp	Gln	Asp 240			
Pro	His	Ser	Trp	Asn 245	Ser	Ser	Phe	Tyr	Arg 250	Leu	Arg	Phe	Glu	Leu 255	Arg			
Tyr	Arg	Ala	Glu 260	Arg	Ser	Lys	Thr	Phe 265	Thr	Thr	Trp	Met	Val 270	Lys	Asp			
Leu	Gln	His 275	His	Cys	Val	Ile	His 280	Asp	Ala	Trp	Ser	Gly 285	Leu	Arg	His			
Val	Val 290	Gln	Leu	Arg	Ala	Gln 295	Glu	Glu	Phe	Gly	Gln 300	Gly	Glu	Trp	Ser			

Glu Trp Ser Pro Glu Ala Met Gly Thr Pro Trp Thr Glu Ser Arg Ser
305 310 315 320

Pro Pro Ala Glu Asn Glu Val Ser Thr Pro Met Gln Ala Leu Thr Thr
325 330 335

Asn Lys Asp Asp Asp Asn Ile Leu Phe Arg Asp Ser Ala Asn Ala Thr
340 345 350

Ser Leu Pro Val Gln Asp Ser Ser Ser Val Pro Leu Pro Thr Phe Leu
355 360 365

Val Ala Gly Gly Ser Leu Ala Phe Gly Thr Leu Leu Cys Ile Ala Ile
370 375 380

Val Leu Arg Phe Lys Lys Thr Trp Lys Leu Arg Ala Leu Lys Glu Gly
385 390 395 400

Lys Thr Ser Met His Pro Pro Tyr Ser Leu Gly Gln Leu Val Pro Glu
405 410 415

Arg Pro Arg Pro Thr Pro Val Leu Val Pro Leu Ile Ser Pro Pro Val
420 425 430

Ser Pro Ser Ser Leu Gly Ser Asp Asn Thr Ser Ser His Asn Arg Pro
435 440 445

Asp Ala Arg Asp Pro Arg Ser Pro Tyr Asp Ile Ser Asn Thr Asp Tyr
450 455 460

Phe Phe Pro Arg
465

<210> 214
<211> 288
<212> PRT
<213> Mus musculus

<400> 214

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

Leu Ser Trp Gln Ser Gly Trp Leu Leu Glu Val Pro Asn Gly Pro Trp
20 25 30

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

Asn Ala Thr Phe Thr Cys Ser Leu Ser Asn Trp Ser Glu Asp Leu Met
50 55 60

Leu Asn Trp Asn Arg Leu Ser Pro Ser Asn²⁰⁹ Gln Thr Glu Lys Gln Ala
65 70 75 80

Ala Phe Cys Asn Gly Leu Ser Gln Pro Val Gln Asp Ala Arg Phe Gln
85 90 95

Ile Ile Gln Leu Pro Asn Arg His Asp Phe His Met Asn Ile Leu Asp
100 105 110

Thr Arg Arg Asn Asp Ser Gly Ile Tyr Leu Cys Gly Ala Ile Ser Leu
115 120 125

His Pro Lys Ala Lys Ile Glu Glu Ser Pro Gly Ala Glu Leu Val Val
130 135 140

Thr Glu Arg Ile Leu Glu Thr Ser Thr Arg Tyr Pro Ser Pro Ser Pro
145 150 155 160

Lys Pro Glu Gly Arg Phe Gln Gly Leu Val Val Gly Val Val Gly Gly
165 170 175

Leu Leu Gly Ser Leu Val Leu Leu Val Trp Val Leu Ala Val Ile Cys
180 185 190

Ser Arg Ala Ala Arg Gly Thr Ile Gly Ala Arg Arg Thr Gly Gln Pro
195 200 205

Leu Lys Glu Asp Pro Ser Ala Val Pro Val Phe Ser Val Asp Tyr Gly
210 215 220

Glu Leu Asp Phe Gln Trp Arg Glu Lys Thr Pro Glu Pro Pro Val Pro
225 230 235 240

Cys Val Pro Glu Gln Thr Glu Tyr Ala Thr Ile Val Phe Pro Ser Gly
245 250 255

Met Gly Thr Ser Ser Pro Ala Arg Arg Gly Ser Ala Asp Gly Pro Arg
260 265 270

Ser Ala Gln Pro Leu Arg Pro Glu Asp Gly His Cys Ser Trp Pro Leu
275 280 285

<210> 215
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> G1m

<400> 215

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

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
290 295 300 211

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

Gln Lys Ser Leu Ser Leu Ser Pro
325

<210> 216
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> lam1

<400> 216

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

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

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

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

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

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

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

<210> 217
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> G1d

<400> 217

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

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser

35 40 212 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
 225 230 235 240
 Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320

Gln Lys Ser Leu Ser₃₂₅ Leu Ser Pro

<210> 218
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> k0
 <400> 218

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

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

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

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

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

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

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

<210> 219
 <211> 330
 <212> PRT
 <213> Homo sapiens

<400> 219

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

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

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

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

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

Tyr Ile Cys Asn Val₈₅ Asn His Lys Pro Ser₉₀ Asn Thr Lys Val₉₅ Asp Lys
 Lys Val Glu Pro₁₀₀ Lys Ser Cys Asp Lys₁₀₅ Thr His Thr Cys Pro₁₁₀ Pro Cys
 Pro Ala Pro₁₁₅ Glu Leu Leu Gly Gly₁₂₀ Pro Ser Val Phe Leu₁₂₅ Phe Pro Pro
 Lys Pro₁₃₀ Lys Asp Thr Leu Met₁₃₅ Ile Ser Arg Thr Pro₁₄₀ Glu Val Thr Cys
 Val₁₄₅ Val Val Asp Val₁₅₀ Ser His Glu Asp Pro Glu₁₅₅ Val Lys Phe Asn Trp₁₆₀
 Tyr Val Asp Gly Val₁₆₅ Glu Val His Asn Ala₁₇₀ Lys Thr Lys Pro Arg₁₇₅ Glu
 Glu Gln Tyr Asn₁₈₀ Ser Thr Tyr Arg Val₁₈₅ Val Ser Val Leu Thr₁₉₀ Val Leu
 His Gln Asp₁₉₅ Trp Leu Asn Gly Lys₂₀₀ Glu Tyr Lys Cys Lys₂₀₅ Val Ser Asn
 Lys Ala₂₁₀ Leu Pro Ala Pro Ile₂₁₅ Glu Lys Thr Ile Ser₂₂₀ Lys Ala Lys Gly
 Gln Pro Arg Glu Pro Gln₂₃₀ Val Tyr Thr Leu Pro₂₃₅ Pro Ser Arg Asp Glu₂₄₀
 Leu Thr Lys Asn₂₄₅ Gln Val Ser Leu Thr Cys₂₅₀ Leu Val Lys Gly Phe₂₅₅ Tyr
 Pro Ser Asp Ile₂₆₀ Ala Val Glu Trp Glu₂₆₅ Ser Asn Gly Gln Pro₂₇₀ Glu Asn
 Asn Tyr Lys₂₇₅ Thr Thr Pro Pro Val₂₈₀ Leu Asp Ser Asp Gly₂₈₅ Ser Phe Phe
 Leu Tyr₂₉₀ Ser Lys Leu Thr Val₂₉₅ Asp Lys Ser Arg Trp₃₀₀ Gln Gln Gly Asn
 Val₃₀₅ Phe Ser Cys Ser Val₃₁₀ Met His Glu Ala Leu₃₁₅ His Asn His Tyr Thr₃₂₀
 Gln Lys Ser Leu Ser₃₂₅ Leu Ser Pro Gly Lys₃₃₀

<210> 220
 <211> 326
 <212> PRT

<213> Homo sapiens

<400> 220

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
 1 5 10 15
 Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr
 65 70 75 80
 Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro
 100 105 110
 Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 115 120 125
 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 130 135 140
 Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly
 145 150 155 160
 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn
 165 170 175
 Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp
 180 185 190
 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro
 195 200 205
 Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu
 210 215 220
 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn
 225 230 235 240
 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 245 250 255
 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr

260 265 216 270
 Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 275 280 285
 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 290 295 300
 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 305 310 315 320
 Ser Leu Ser Pro Gly Lys
 325

<210> 221
 <211> 377
 <212> PRT
 <213> Homo sapiens

<400> 221

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
 1 5 10 15
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro
 100 105 110
 Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg
 115 120 125
 Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys
 130 135 140
 Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro
 145 150 155 160
 Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 165 170 175

217

Pro Lys Asp Thr₁₈₀ Leu Met Ile Ser Arg₁₈₅ Thr Pro Glu Val Thr₁₉₀ Cys Val

Val Val Asp₁₉₅ Val Ser His Glu Asp₂₀₀ Pro Glu Val Gln Phe₂₀₅ Lys Trp Tyr

Val Asp₂₁₀ Gly Val Glu Val His₂₁₅ Asn Ala Lys Thr Lys₂₂₀ Pro Arg Glu Glu

Gln Tyr Asn Ser Thr Phe₂₃₀ Arg Val Val Ser Val₂₃₅ Leu Thr Val Leu His₂₄₀

Gln Asp Trp Leu Asn₂₄₅ Gly Lys Glu Tyr Lys₂₅₀ Cys Lys Val Ser Asn₂₅₅ Lys

Ala Leu Pro Ala₂₆₀ Pro Ile Glu Lys Thr₂₆₅ Ile Ser Lys Thr Lys₂₇₀ Gly Gln

Pro Arg Glu₂₇₅ Pro Gln Val Tyr Thr₂₈₀ Leu Pro Pro Ser Arg₂₈₅ Glu Glu Met

Thr Lys₂₉₀ Asn Gln Val Ser Leu₂₉₅ Thr Cys Leu Val Lys₃₀₀ Gly Phe Tyr Pro

Ser Asp Ile Ala Val Glu₃₁₀ Trp Glu Ser Ser Gly₃₁₅ Gln Pro Glu Asn Asn₃₂₀

Tyr Asn Thr Thr Pro₃₂₅ Pro Met Leu Asp Ser₃₃₀ Asp Gly Ser Phe Phe₃₃₅ Leu

Tyr Ser Lys Leu₃₄₀ Thr Val Asp Lys Ser₃₄₅ Arg Trp Gln Gln Gly₃₅₀ Asn Ile

Phe Ser Cys₃₅₅ Ser Val Met His Glu₃₆₀ Ala Leu His Asn Arg₃₆₅ Phe Thr Gln

Lys Ser₃₇₀ Leu Ser Leu Ser Pro₃₇₅ Gly Lys

<210> 222
<211> 327
<212> PRT
<213> Homo sapiens

<400> 222

Ala Ser Thr Lys Gly₅ Pro Ser Val Phe Pro₁₀ Leu Ala Pro Cys Ser Arg₁₅

Ser Thr Ser Glu₂₀ Ser Thr Ala Ala Leu₂₅ Gly Cys Leu Val Lys₃₀ Asp Tyr

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser

35 40 218 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> 223
<211> 328
<212> PRT
<213> Artificial Sequence

<220>
<223> G1T6

<400> 223

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

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

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

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

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

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

Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

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

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

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

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

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

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly

210 215 220 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300
 Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320
 Gln Lys Ser Leu Ser Leu Ser Pro
 325

<210> 224
 <211> 122
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> TR01H113

<400> 224

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala
 20 25 30
 Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Gln Ile Lys Asp Lys Ser Gln Asn Tyr Ala Thr Tyr Val Ala Glu
 50 55 60
 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Ala Asp Ser Lys Asn Ser
 65 70 75 80
 Ile Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Arg Tyr Val His Tyr Ala Ala Gly Tyr Gly Val Asp Ile Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser²²¹
115 120

<210> 225
<211> 219
<212> PRT
<213> Artificial Sequence

<220>
<223> L0011-k0

<400> 225

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

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

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

Pro Arg 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 Val Gly Val Tyr Tyr Cys Gly Gln Gly
85 90 95

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

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
115 120 125

Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
130 135 140

Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
145 150 155 160

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
165 170 175

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

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
195 200 205

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
210 215